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October 28, 2004

ALLIANCE OFFICE 416 West Third Street Alliance, Nebraska 69301 Telephone: (308) 762-5484



Sieu Kour, PE
Nebraska Department of Environmental Quality
Suite 400, The Atrium
1200 N Street
Post Office Box 98922
Lincoln, Nebraska 68509-8922

Re: AGROMAC - Lockwood Site

NDEQ/I.D. #NED 044101442

Dear Ms. Kour:

Please find enclosed the Revised Permit Application, Parts A and B, for your review and hopefully approval.

Thank you.

Very truly yours,

Thomas T. Holyoke

TTH:cmm

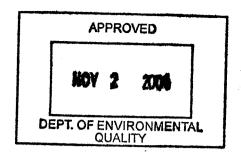
cc:

AGROMAC International, Inc.

James S. Mitchell, Esq.



*1



REVISED PERMIT APPLICATION

RCRA HAZARDOUS WASTE PERMIT PARTS A AND B

AGROMAC - LOCKWOOD SITE

EPA ID NUMBER NED 044101442

Submitted by:

AGROMAC International, Inc.

Post Office Box 100

Scottsbluff, Nebraska 69363-0100

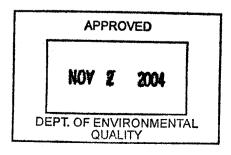
308-641-5140

October 29, 2004

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United States Environmental Protection Agency HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit		-	ame												MI:	Last Name:				
Contact (See instructions on	<u> </u>		sep												G	Schon				
page 35)			Nur 3–6			40										Phone Number Extension: Not Applicable				
2. Facility Permit	+		or P											·	 	Not Applicable				
Contact Mailing			st (Box	10	00											
Address (See instructions on			own																	
page 35)		ate:		_																
	<u> </u>		ra	ska	<u> </u>											T				
		untr U ni	y: Lte	d 9	sta	tes	3			_						Zip Code: 69363-0100				
3. Legal Owner Mailing Address and			or P				Box	: 10	00											
Telephone Number (See instructions on		City, Town, or Village: Scottsbluff																		
page 36)		ate: Veb	ra	ska	ı															
	Nebraska Country: Zip Code:												Phone Number							
	+	United States 69363-0100 308-641-5140																		
4. Operator Mailing Address and		Street or P.O. Box: Not Applicable																		
Telephone Number													-							
(See instructions on age 36)		City, Town, or Village:																		
age 30)	St	State:																		
	Co	unti	ry:					·····			Zip	Co	de:			Phone Number				
5. Facility Existence	Fa	Facility Existence Date (mm/dd/yyyy):											<u> </u>							
Date (See instructions on		11/01/72 (see paragraph 14)																		
page 36)		11/	01,	/72	: (see	e p	ara	agr	ар	h]	L4)								
6. Other Environmental	Pern	nits	(See	ins	truc	tion	s on	pag	je 30	6)										
A. Permit Type (Enter code)					В.	Per	mit	Nun	nber						_	C. Description				
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7. Nature of Business (P	rovi	de a	brie	et de	scri	ptio	n; s	ee ir	nstru	ıctic	ons o	on p	age	37)						
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Rental Facili	ty																			
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EDA Form 9700 22 /	D	:	3 E 11	200	2)							n	4	of 6		Control 1 but 1 1				

EPA Form 8700-23 (Revised 5/2002)

8. Process Codes and Design Capacities (See instructions on page 37)

PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 9.

- B. PROCESS DESIGN CAPACITY- For each code entered in column A, enter the capacity of the process.
 - 1. AMOUNT Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.
 - 2. UNIT OF MEASURE For each amount entered in column B(1), enter the code in column B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.
- C. PROCESS TOTAL NUMBER OF UNITS Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
D79 D80	Disposal: Underground Injection Well Disposal Landfill	Gallons; Liters; Gallons Per Day; or Liters Per Day Acre-feet; Hectare-meter; Acres; Cubic Meters;	T81 T82 T83	Cement Kiln Lime Kiln Aggregate Kiln Phosphate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per
D81 D82 D83 D99 S01 S02 S03 S04 S05	Land Treatment Ocean Disposal Surface Impoundment Disposal Other Disposal Storage: Container Tank Storage Waste Pile Surface Impoundment Storage Drip Pad	Hectares; Cubic Yards Acres or Hectares Gallons Per Day or Liters Per Day Gallons; Liters; Cubic Meters; or Cubic Yards Any Unit of Measure Listed Below Gallons; Liters; Cubic Meters; or Cubic Yards Gallons; Liters; Cubic Meters; or Cubic Yards Cubic Yards or Cubic Meters Gallons; Liters; Cubic Meters Gallons; Liters; Cubic Meters; or Cubic Yards Gallons; Liters; Acres; Cubic Meters; Hectares; or	T85 T86 T87 T88 T89 T90	Coke Oven Blast Furnace Smelting, Melting, or Refining Furnace Titanium Dioxide Chloride O xidation Reactor Methane Reforming Furnace Pulping Liquor Recovery Furnace Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour
S06	Containment Building Storage Other Storage <u>Treatment:</u> Tank Treatment	Cubic Yards Cubic Yards or Cubic Meters Any Unit of Measure Listed Below Gallons Per Day; Liters Per Day; Short Tons Per	T92 T93 T94	Halogen Acid Furnaces Other Industrial Furnaces Listed In 40 CFR §260.10 Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour;
T02	Surface Impoundment Treatment	Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds		Miscellaneous (Subpart X)	Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
Т03	Incinerator	Per Hour; Short Tons per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms	X01 X02	Open Burning/Open Detonation Mechanical Processing	Any Unit of Measure Listed Below Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
Т04	Other Treatment	Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day;	X03	Thermal Unit Geologic Repository	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour Cubic Yards; Cubic Meters; Acre-feet;
T80	Boiler	Liters Per Hour; or Million Btu Per Hour Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X99	Other Subpart X	Hectare-meter; Gallons; or Liters Any Unit of Measure Listed Below

UNIT OF	UNIT OF
MEASURE	MEASURE CODE
Gallons	G
Gallons Per Hour	E
Gations Per Day	U
Liter s	L
Liters Per Hour	Н
Liters Per Day	v

UNIT OF MEASURE	UNIT OF MEASURE CODE
Short Tons Per Hour	D
Metric Tons Per Hour	w
Short Tons Per Day	N
Metric Tons Per Day	
Pounds Per Hour	
Kilograms Per Hour	R
Million Btu Per Hour	X

 UNIT OF MEASURE	UNIT OF MEASURE CODE
Cubic Yards	ү
Cubic M eters	С
Acres	В
Acre-feet	A
Hectares	Q
Hectare-meterAPPROVE	D F

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DEPT. OF ENVIRONMENTAL QUALITY

8. 1	Proces	ss Co	des a	nd De	sign Capacities (Continued)				
-	EXA	MPL	E FO	R COI	PLETING Item 8 (shown in line number X-1 below): B. PROCESS DESIGN CAPA		has a storage ta	ank, which can h	old 533.788 gallons.
	ine mber		A. cess m list a	Code	(1) Amount (Specify)	<i></i>	(2) Unit of Measure (Enter code)	C. Process Total Number of Units	For Official Use Only
x	1	s	0	2		. 7 8 8	G	0 0 1	
	1	D	8	3_	684,000	000	G	0 0 1	
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	3	 	ļ	ļ		•			
	4	<u> </u>	-	<u> </u>					
	5		<u> </u>	-		•			
	7	<u> </u>	-						
	8	 	+			•			
	9	-		+		•			
1	0			-		·	<u> </u>		
1	1				·				
1	2								
1	3								
					o list more than 13 process codes, attach an addition y, taking into account any lines that will be used for				
9 (Other	Proce	sses	(See	nstructions on page 37 and follow instructions from	Item 8 for	D99, S99, T04	and X99 process	codes)
_	ine				B. PROCESS DESIGN CAPACIT	Υ		C.	
	mber er#s in	-	A.			(2) U	กแ ง เ	cess Total	
	uence Item 8)		cess m list a	Code	(1) Amount (Specify)		sure N	umber of Units	D. Description of Process
X	1	T	0	4					In-situ Vitrification
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DEPT. OF ENVIRONMENTAL QUALITY

10. Description of Hazardous Wastes (See instructions on page 37)

- LEPA HAZARDOUS WASTE NUMBER Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE For each quantity entered in column B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate the waste will be stored, treated, and/or disposed at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

- 1. Enter the first two as described above.
- 2. Enter "000" in the extreme right box of Item 10.D(1).
- 3. Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.
- 2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

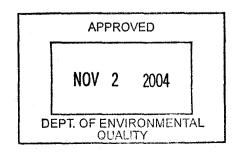
- 1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- 2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- 3. Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

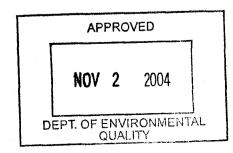
				E	A. PA rdou	•	B. Estimated Annual	C. Unit of		D. PROCESSES										
N	Lin um	ne ber		Was	te No r cod) .	Quantity of Waste	Measure (Enter code)		***	(1) PR	OCESS	CODE	S (Ent	er code)		(2) PROCESS DESCRIPTION (If a code is not entered in D(1))			
		1	К	0	5	4	900	Р	Т	0	3	D	8	0						
T		2	D	0	0	2	400	Р	Т	0	3	D	8	0						
7		3	D	0	0	1	100	Р	Т	0	3	D	8	0						
 		4	D	0	0	2											Included With Above			

NOV 2 2004
DEPT. OF ENVIRONMENTAL QUALITY

10.	Desc	Iptio	iii Of	naza	aruo	us wastes (Co	ntinued; use a		iai Sile	E12 92 1	recess	ai y)		. PROC			
	ine mber	<u> </u>				B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)			(1) PR	OCESS		(2) PROCESS DESCRIPTION (If a code is not entered in D(1))				
	1	D	0	0	2	Disconti	nued	D	8	3							Spent pickle liquor
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ĺ	A .	B.	C. Unit of Measure (Enter code)		E. PROCESSES									
Line Number	EPA Hazardous Waste No. (Enter code)	Estimated Annual Quantity of Waste				(1) PR	1	(2) PROCESS DESCRIPTION (If a code is not entered in E(
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1. Map (See instructions on page 38) Video to this application a long-graphic map, or other equivalent map, of the area extending to all least one mile beyond properly boundaries. The map must show the outline of the feelity, the location of each of its orising and proposed intake and discharge structures, each of its hazardous waste treatment, shoage, or disposal fealthes, and each well where it highes fluids underground. Include all springs, must sand other surface water bodies in this map and. See instructions on page 39) All existing facilities must include a seek drawing of the facility (see instructions for more detail). 3. Photographs (See instructions on page 39) All existing facilities must include photographs (aediat or ground-level) that clearly delinede all existing structures; existing storage, treatment and disposal areas and alless of future stronge, treatment or disposal areas less enstructions for more detail). 4. Comments (See instructions on page 39) Paragraph 5: Pacility owner is not certain of the exact day in November of 1972. APPROVED APPROVED DEPT: OF SINVIRONINE-WIAL										ONE	F. 2001	J-0034 EX	ores 10/
must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its heardrous waste treatment, storage, or disposal facilities, and each well where it impects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements. 2. Facility Drawing (See instructions on page 39) All existing facilities must include photographs (certal or ground-level) that clearly delinede all existing structures; existing storage, treatment and disposal areas and sitss of future storage, treatment or disposal areas (see instructions for more detail). 4. Comments (See instructions on page 39) Paragraph 5: Facility owner is not certain of the exact day in November of 1972. Approved Approved Approved DEPT-OF ENVIRONMENTAL.	1. Map (See instructio	ns on page 38)				,						· · · · · · · · · · · · · · · · · · ·	
All existing facilities must include a scale drawing of the facility (see instructions for more detail). 3. Photographs (See instructions on page 39) All existing facilities must include photographs (seefal or ground-level) that clearly defined all existing structures; existing storage, treatment and disposal areas (see instructions for more detail). 4. Comments (See instructions on page 39) Paragraph 5: Facility owner is not certain of the exact day in November of 1972. APPROVED NOV 2 2004 DEPTIOF ENVIRONMENTAL	must show the outline treatment, storage, or	of the facility, the disposal facilities,	location of e and each w	each of its rell where i	existing and propos	sed inta	ke and dis	charge s	tructui	es, each of its	s haza	rdous was	te
3. Photographs (See instructions on page 39) All existing facilities must include photographs (serial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas and sites of that storage, treatment or disposal areas (see instructions for more detail). 4. Comments (See instructions on page 39) Paragraph 5: Facility owner is not certain of the exact day in November of 1972. Approved Approved NOV 2 2004 DEPTIOF ENVIRONMENTAL	2. Facility Drawing (Se	e instructions o	n page 39)										
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Paragraph 5: Facility owner is not certain of the exact day in November of 1972. APPROVED NOV-2 2004 DEPT. OF ENVIRONMENTAL									tures;	existing stora	ge, tre	atment an	d
APPROVED NOV 2 2004 DEPT. OF ENVIRONMENTAL	4. Comments (See ins	tructions on pag	je 39)						_				
APPROVED NOV 2 2004 DEPT. OF ENVIRONMENTAL	Paragraph 5:	Facility	owner i	is not	certain of	the	exact	day	in l	November	of	1972.	
NOV 2 2004 DEPT. OF ENVIRONMENTAL													
NOV 2 2004 DEPT. OF ENVIRONMENTAL						-							
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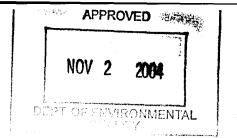
MAIL THE COMPLETED FORM TO: The Appropriate EPA mal or State Office.	United States Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION FORM							
1. Reason for Submittal (See instructions on page 25) CHECK CORRECT BOX(ES)	eason for Submittal: To provide initial notification (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities). To provide subsequent notification (to update site identification information). As a component of a First RCRA Hazardous Waste Part A Permit Application. As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment #							
2. Site EPA ID Number (See instructions on page 26)	EPA ID Number: N,ED, 0,44, 10,1,442,							
3. Site Name (See instructions on page 26)	Name: AGROMAC - Lockwood site							
4. Site Location Information (See	Street Address: 220759 Highway 92							
instructions on page 26)	City, Town, or Village: Gering	State: NE						
	County Name: Scotts Bluff	Zip Code: 69341						
5. Site Land Type (See instructions on page 26)	Site Land Type: 20 Private	☐ Indian ☐ Municipal ☐ State ☐ Other						
6. North American Industry Classification System (***^\CS) Code(s) for the	A. 53112 B. 53119							
(See instructions on page 26)	C. D.							
7. Site Mailing Address (See instructions on page	Street or P. O. Box: Post Office Box 100							
(See instructions on page 27)	City, Town, or Village: Scottsbluff							
	State: NE							
·	Country: United States	Zip Code: 69363-0100						
8. Site Contact Person (See instructions on pages 27)	First Name: Joseph MI: G	Last Name: Schon						
mondono on pageo 11)	Phone Number: 308-641-5140	Phone Number Extension:						
9. Legal Owner and Operator of the Site (See	A Name of Site's Legal Owner: AGROMAC International, Inc.	Date Became Owner (mm/dd/yyyy): Please see Item 12						
instructions on pages 27 and 28)	Owner Type: 🔯 Private 🔾 County 🔾 District 🔾 Federal 🔾	Indian ☐ Municipal ☐ State ☐ Other						
and 20)	B. Name of Site's Operator: AGROMAC International, Inc.	Date Became Operator (mm/dd/yyyy): Please see Item 12						
	Operator Type: 28 Private 🖸 County 🗅 District 🗅 Federal 🗅	Indian						

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			EPA ID No. N E D 0 4 4 1 0 1 4 4 2							
10. Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. See instructions on pages 28 to 32)										
Yazardous Waste Activities										
Generator of Hazardous Waste (choose only one of the following the control of	nree categories)		For Items 2 through 6, check all that apply:							
a. LQG: Greater than 1,000 kg.	/mo (2,200 lbs./mo.) of non	n-acute	2. Transporter of Hazardous Waste 3. Transporter Storer of Disposer of Hazardous Waste (at your							
hazardous waste; or b. SQG: 100 to 1,000 kg/mo (2	220 - 2,200 lbs./mo.) of nor	n-acute	3. Treater, Storer, or Disposer of Hazardous Waste (at you site) Note: A hazardous waste permit is required for this activity.							
hazardous waste; or C c. CESQG: Less than 100 kg/n waste	no (220 lbs./mo.) of non-ac	cute hazardous	4. Recycler of Hazardous Waste (at your site) Note: A hazardous waste permit may be required for this activity.							
waste In addition, indicate other genera	ntor activities (check all t	hat apply)	5. Exempt Boiler and/or Industrial Furnace							
d. United States Importer of Ha	zardous Waste		a. Small Quantity On-site Burner Exemption							
			☐ b. Smelting, Melting, and Refining Furnace Exemption							
☐ e. Mixed Waste (hazardous and	radioactive) Generator		☐ 6. Underground Injection Control							
B. Universal Waste Activities			C. Used Oil Activities							
 Large Quantity Handler of Universa [refer to your State regulations to d types of universal waste generated (check all boxes that apply): 	etermine what is regulate	ed]. Indicate	 1. Used Oil Transporter - Indicate Type(s) of Activity(ies) a. Transporter b. Transfer Facility 							
	Generated Accumula	<u>ited</u>	Used Oil Processor and/or Re-refiner - Indicate Type(s) of Activity(ies)							
a. Batteries			☐ a. Processor							
b. Pesticides	0 0		☐ b. Re-refiner							
c. Thermostats			☐ 3. Off-Specification Used Oil Burner							
d. Lamps			4. Used Oil Fuel Marketer - Indicate Type(s) of Activity(ies)							
e. Other (specify)										
f. Other (specify)			☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner							
g. Other (specify)			□ b. Marketer Who First Claims the Used Oil Meets the							
☐ 2. Destination Facility for Universal W Note: A hazardous waste permit may			Specifications							
11. Description of Hazardous Wastes (See instructions on page	33)	· · · · · · · · · · · · · · · · · · ·							
			codes of the Federal hazardous wastes handled at your site. List them in an additional page if more spaces are needed.							
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EPA Form 8700-23 (Revised 5/2002)	Page 2 of 3 A-9	DEPT. OF ENVIRONMENTAL QUALITY							

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FACILITY DESCRIPTION

The property on which the site is located is in the East Half of the Southeast Quarter of Section 1, T21N, R55W in Scotts Bluff County, Nebraska. Historically, the property was a manufacturing facility owned by Lockwood Corporation. Lockwood was engaged in the fabrication of agricultural related machinery, center-pivot irrigation systems, and steel truck bodies.

The plant property is presently surrounded by agricultural land on the south and east sides, industrial property on the west side, and industrial and State Highway 92 on the north side. See attached location map of the Lockwood facility showing contours, roads and highways, and it's location in relation to the town of Gering, Nebraska. Figure 1 is based on the USGS Scottsbluff South and Minatare Quadrangle maps.

Lockwood maintained a galvanizing process as part of its operations. In general, the waste discharged from the galvanizing process consisted of a 5% to 15% solution of waste sulfuric acid. At it's peak operation, the process discharged up to two (2) batches of waste acid per week, each batch having a volume of between 5,000 to 8,000 gallons. Prior to 1984, this waste acid was discharged to two evaporation ponds located southwest of the Galvanizing Building. The cells had bottom dimensions of about 100 ft x 90 ft and 100 ft x 100 ft. At an average liquid depth of 4 feet, the combined estimated capacity of the two cells was 684,000 gallons.

Construction records indicate that the north cell was constructed with a mixed soil and bentonite liner on the bottom and to an elevation of 3 feet above the bottom on the sloped interior surfaces of the dikes. It is assumed that the south cell was unlined since no records were available on this cell and test borings were unable to determine the presence of a liner.

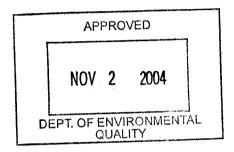
The south cell was placed into service in November 1972 and received wastes until February of 1978 at which time the north cell was constructed and placed into operation. The north cell received wastes from this time until June, 1984, when discharges to the cell were stopped, as requested by Administrative Order. Since that time, acids have been filtered and recycled on site, with the remaining waste acid being shipped to licensed hazardous waste disposal sites.

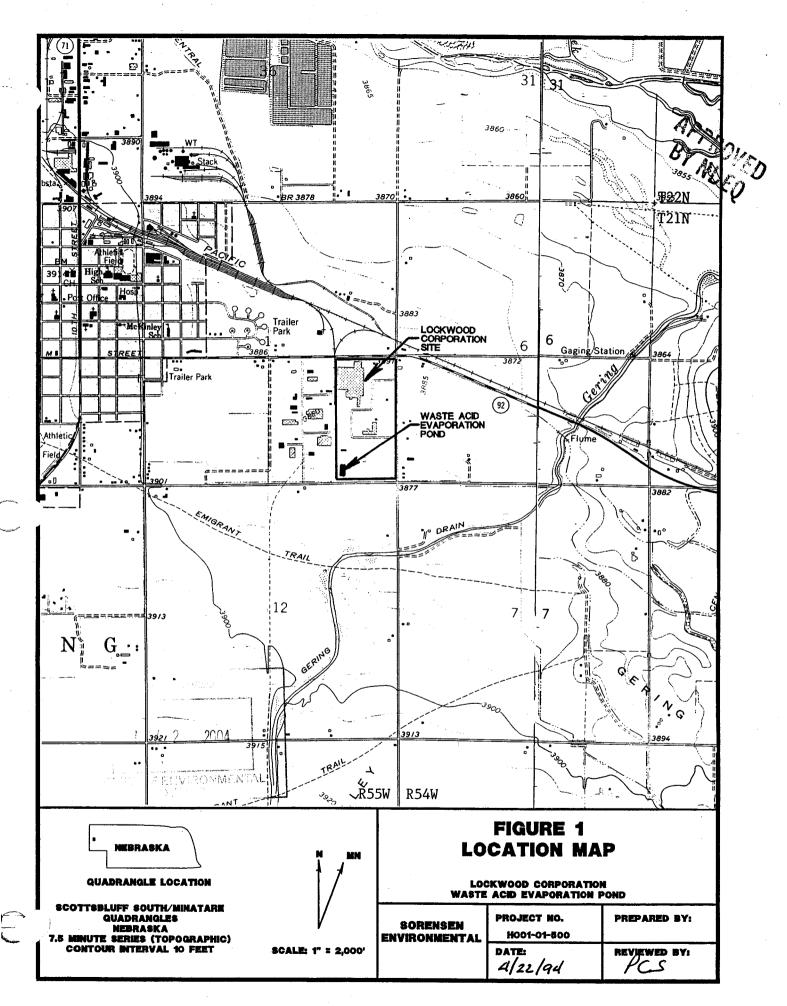
In August 1984, a preliminary Hydrogeologic Investigation confirmed that a leakage occurred in the north cell due to erosion of the clay liner near the influent discharge pipe. Additional investigations defined the extent and severity of the leakage and, in September 1985, a Closure Plan was submitted to the Nebraska Department of Environmental Control outlining procedures and estimated costs for closure of the waste and evaporation ponds. A Post Closure Plan for the facility was also submitted to the NDEC in September 1985, identifying groundwater monitoring and maintenance activities which were to be carried out after closure.

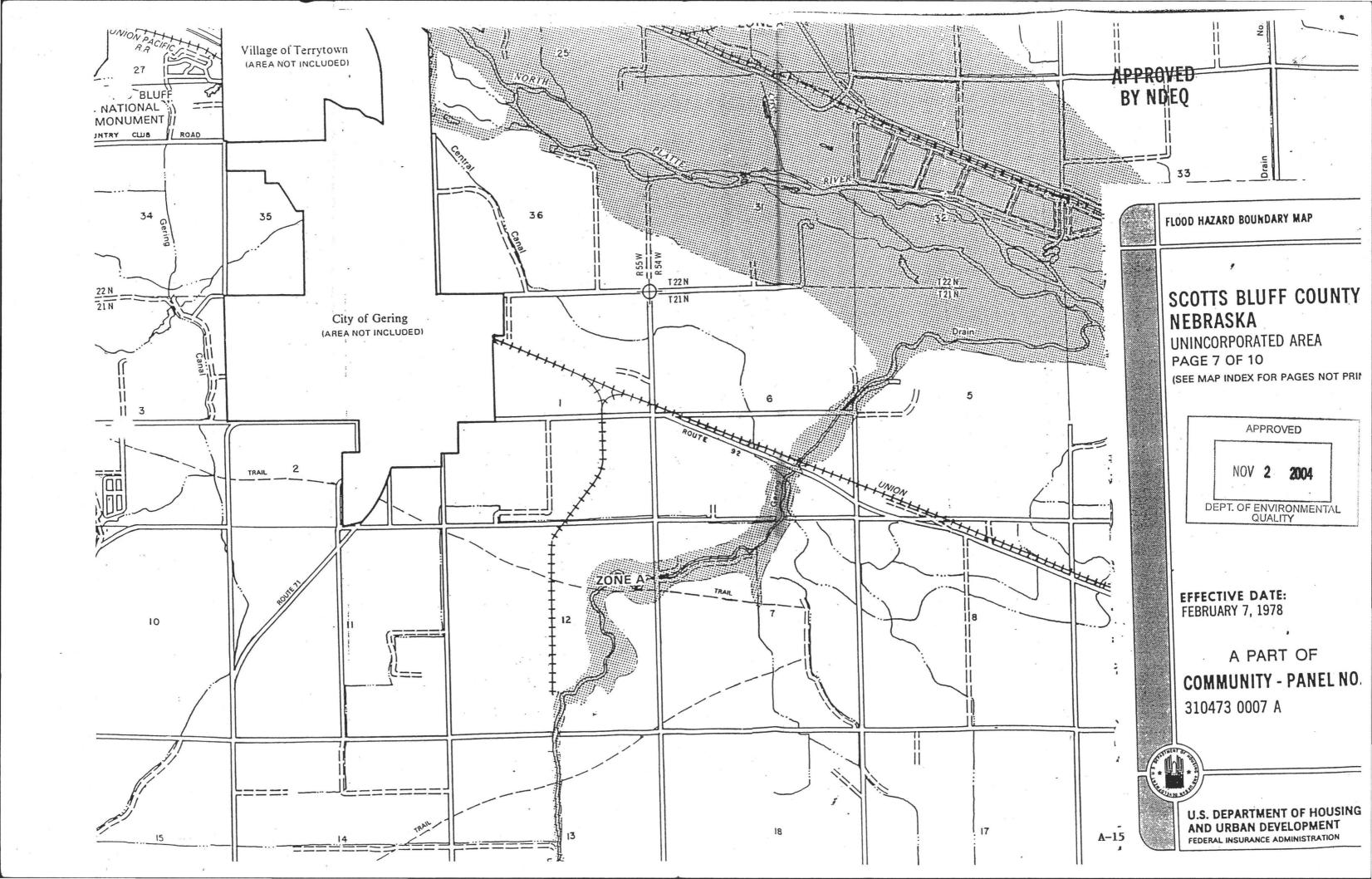
In October 1985, eight monitoring wells and two monitoring/interceptor wells were constructed around the evaporation ponds. Groundwater samples from each of these wells (designated M-l through M-8) were tested regularly from November, 1985 until September, 1987. Semi-annual

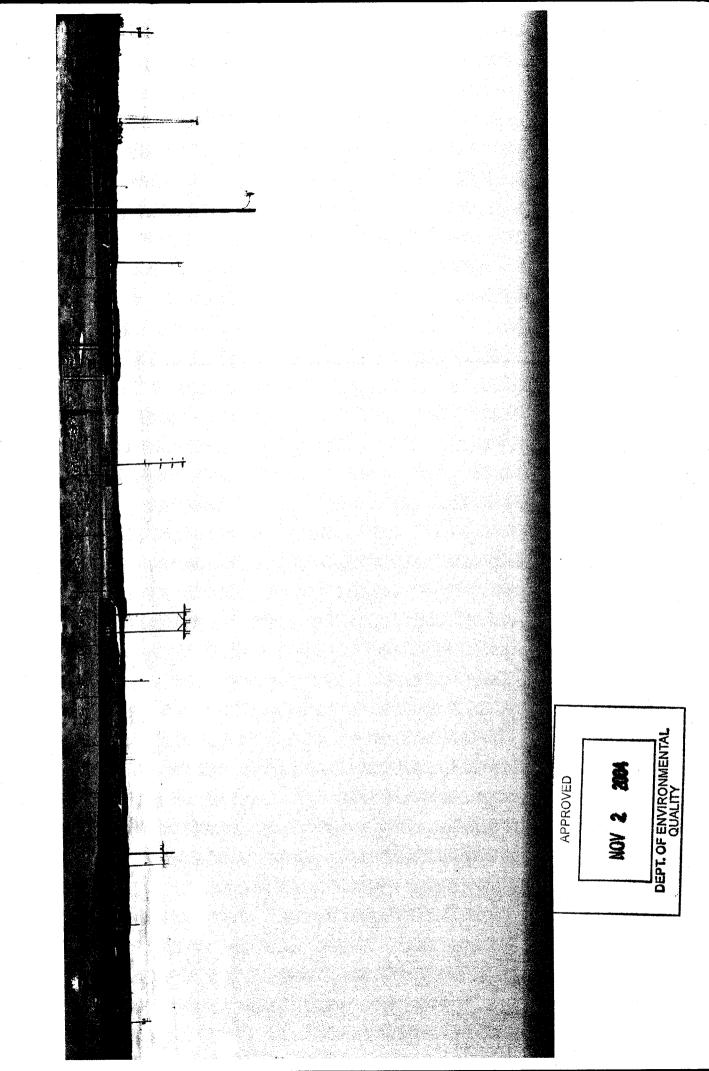
sampling has continued regularly since that time (with the exception of the fall, 1992 sampling event) for wells M-3, M-4, M-6, and M-7.

Closure of the evaporation ponds was performed in November, 1986. The work consisted primarily of pushing the exterior dikes into the center of the cells, thereby covering the contained sludge. Hydrated lime was then spread over the entire disturbed areas and covered with a 6" to 12" layer of compacted silty-clay soil. The soil was then covered with a final cover system consisting of a 20 mil thick PVC liner, 1 to 2 feet of compacted silty-clay soil, and 2 inches of a gravel stabilizing surface layer. The site was enclosed in an 8-feet-high chain-link fence with proper signing.









SITE SECURITY

The waste acid evaporation ponds have been enclosed in an 8-feet-high chain-link fence. The fence on the west and south sides are perimeter fences enclosing the entire Lockwood property. The north and east fences are new interior fences installed during closure operations. A locked access gate is located on the interior fence. Inspection of the closed area is discussed under Post Closure Inspection on page B-2 in which inspection of the security locks is specified in the Post Closure Inspection Schedule.

Access to the Lockwood property is limited to authorized personnel only. The perimeter fencing and the main building physically restrict access. The main entrance to the property is locked during off hours. Two secondary entrances exist on the east side of the facility, both of which are kept locked.

Signs with the legend "Closed Hazardous Waste Site - Keep Out" have been posted at each entrance to the closed waste-acid evaporation pond enclosure, in sufficient number to be seen from any approach. Signs are legible from a distance of 25 feet.

It is felt that no personnel training is necessary as none of the activity described herein requires any specific or technical knowledge or skills.



POST CLOSURE INSPECTION

Post-Closure Inspection Schedule

Waste acid evaporation ponds in the southwest comer of the Lockwood property were closed in accordance with 40 CFR 265. Regular inspection and maintenance of the site must be accomplished under the Post Closure Plan.

Inspection of the closed waste site is performed on a monthly basis. Adherence to the following check sheet verifies acceptable completion of inspection and any required maintenance:

- 1) Examine and test locks on both the West and North gates to verify they are secure and functional.
- 2) Check gravel and clay surface covers for wind or water erosion or other damage. If damage exists contact maintenance for evaluation and repair. If necessary, a local contractor can be contracted to repair or replace the surface cover. Only light weight equipment or full tread equipment should be used to limit potential further damage to the cover.
- 3) Evidence of ponding or improper drainage detrimental to the gravel or soil cover should be reported and corrected.
- Excessive weed growth must be cut or removed to prevent heavy weed or plant root damage to the cover or security fence. Weeds can be cut with any light weight equipment, trimmers or pulled by hand. No heavy tired equipment, which would leave deep damaging tracks or get stuck in the cover can be used. The use of any herbicides for weed control would require Nebraska Department of Environmental Quality (NDEQ) pre-approved.
- 5) Check all monitoring and removal wells for damage to riser pipes, casing, caps in position, and functional locks. Report any problems for immediate corrective action to AGROMAC.
- 6) Mow cap every three weeks during growing season.
- 7) Walk and examine perimeter fence for any sign of damage which requires repair. Maintenance is to be contacted for any problems.

See attached Post Closure Inspection Report format used by applicant.



POST CLOSURE INSPECTION SCHEDULE LOCKWOOD CORPORATION

Date (of Inspection	
Inspec	ctor's Name	P. P.
1.	Walk perimeter of fence checking for loose posts, mi fabric, or other obvious damage.	ssing signs, holes in chain-link
	Satisfactory Condition	
	Unsatisfactory Condition	
	Maintenance or corrective action undertaken and date c	completed:
-		
	DateResponsible Party	
2.	Check security locks on access gates to site to assure th	ey are functional.
	Satisfactory Condition	
	Unsatisfactory Condition	
	Maintenance or corrective action undertaken and date c	ompleted:
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	DateResponsible Party	DEPT. OF ENVIRONMENTAL QUALITY

3.	Walk around and over entire site checking gravel surface or water erosion damage.	e and clay soil cover for wind
	Satisfactory Condition	
	Unsatisfactory Condition	PL PP
	Maintenance or corrective action undertaken and date con	mpleted:
-		
	Data Dagmangihla Dagg	
	DateResponsible Party	
4.	Check for evidence of ponding water on gravel surface and site.	improper drainage away from
	Satisfactory Condition	•
	Unsatisfactory Condition	
	Maintenance or corrective action undertaken and date cor	npleted:
		•
	DateResponsible Party	
5.	Check site for excessive weed growth and damage to clay	cover by rodents.
	Satisfactory Condition	APPROVED
	Unsatisfactory Condition	APPROVED
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Data	Dognona	ible Deuts			,	
Date	Respons	ible Party	·		•	
				•		
8, MI-1, caps.	nonitoring wells, and MI-2) for	damage to a	bove grour	d extension	ons, caps ar	nd security
8	Satisfactory Cor	ndition	•			
τ	Unsatisfactory C	Condition				
Mainten	ance or correct	ive action un	ndertaken a	nd date co	mpleted:	
			-			
			· · ·			
	Responsi	ible Party				
Date	Responsi	ible Party				
Date	Responsi	ible Party				
Date	Responsi	ible Party				
Date	Responsi	ible Party				
Date	Responsi	ible Party			APPROVE)
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Date	Responsi	ible Party				004

FACILITY LOCATION INFORMATION

Information concerning the occurrence of flood plans and seismic activities at or near the location of the facilities is presented below.

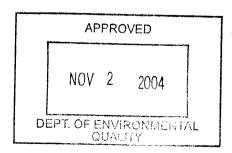
1. 100-Year Flood Plan

The Federal Insurance Administration has issued a Flood Hazard Boundary Map for the area where the Lockwood Facility is located. The map, a copy of which is included on page B-7 indicates that the facilities in question fall outside any Flood Hazard areas.

2. Seismic Standard

The Hydrogeologic Investigation of 1984 included analysis of air photos of the site including the area within a radius of approximately one mile. No lineations suggesting the presence of faulting were observed. Field observations within a radius of about 1000 feet confirmed this conclusion. A literature search (HWS, 1989) produced no documentation of faults in me area. Generally the region contains only a few faults.

Therefore, because of the scarcity of faulting in general in the region and the absence of known Holocene faulting, it is concluded that the site complies with the Seismic standard.



EXPOSURE INFORMATION/RISK ASSESSMENT

Human exposure to hazardous waste or hazardous constituents may occur or be detected through a number of potential exposure pathways. Exposure routes may include air and a inhalation, water ingestion, or fish which have been exposed to a contaminant from the site. The following categories summarize these potential exposure pathways: groundwater, surface water, air (including subsurface gas), soil contamination, and food-chain contamination.

Primarily, the potential for human exposure at the facility is via the groundwater pathway as a result of leaching of metal contaminants to the underlying aquifer. Potential human exposure via groundwater can occur to persons served by a water supply system that draws contaminated groundwater as their water supply through ingestion and dermal exposure while bathing or showering. It could also occur where agricultural land is irrigated with contaminated groundwater and produce is contaminated and ingested. Humans may also be exposed via consumption of game animals that reside in such contaminated areas. In addition, surface waters may be contaminated by inflows of groundwater through bank seepage and springs. As with groundwater, potential human exposure via surface waters can occur to persons served by a water supply system that draws contaminated groundwater as their water supply through ingestion and dermal exposure while bathing or showering. Other potential human exposure to contaminated surface waters can occur through ingestion of contaminated fish, ingestion of contaminated produce as a result of agricultural and being irrigated with contaminated surface water, dermal and ingestion exposures through swimming and other water contact sports in such waters, and via consumption of game animals that reside in such contaminated areas.

From June to October 1984, a hydrogeologic investigation of the spent acid evaporation pond and surrounding area was performed to determine the extent and severity of groundwater contamination, if any, resulting from use of the pond. The hydrogeologic investigation consisted of a review of existing data, a field investigation under the direction of a hydrogeologist, and laboratory analyses of soil and groundwater samples.

Due to relatively benign conditions that exist, and because of the on-going compliance monitoring program implemented at this facility, AGROMAC submits that the following permit application requirements may not be applicable for this site:

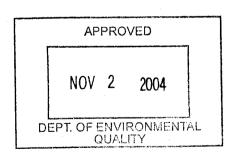
- Preparedness and Prevention requirements of 40 CFR 264, Subpart C; and
- Contingency Plan and Emergency Procedures requirements of 40 CFR 264 Subpart D.

Closure of the facility included the removal of any liquid present, demolition of existing dikes and removal of the influent line, placement of lime and soil layer, installation of impermeable synthetic liner, placing and compacting clay soil cover and gravel stabilization layer, and installing a security fence (documented in the Closure Plan). The potential for "fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water" is minimal at this facility. Requirements of 40 CFR Subparts C and Best Constituents.

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therefore be considered not applicable for this site. Moreover, equipment specified in Subpart C (§264.32) is not applicable for this site, including the following:

- internal communication or alarm system;
- telephone immediately available at the impoundment;
- portable fire extinguisher; and
- water of adequate volume and pressure.



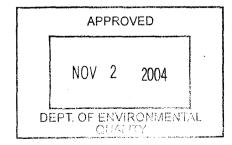
EVAPORATION POND CLOSURE INFORMATION

Closure of the evaporation pond was performed in November, 1986. In general, the closure of the facility was completed in the following manner:

- 1. Pushing the exterior dikes into the center of the cells, thereby covering the contained sludge;
- 2. Placement of hydrated lime and soil layer;
- 3. Installation of impermeable synthetic liner;
- 4. Placing and compacting clay soil cover and gravel stabilizing layer; and
- 5. Installation of security fence with proper signing.

For details on the closure of the facility, refer to the approved Closure Plan (Appendix A). In addition, a Post Closure Plan (Appendix B) for the facility was submitted to the NDEC in September, 1985. The Post Closure Plan identified the groundwater monitoring plan and maintenance activities to be carried out during the post closure care period. Annual and routine periodic inspections and associated maintenance of the facility final cover, security fencing/procedures used to limit public access to the facility, and a groundwater monitoring system will be conducted to ensure that each item remains functionally reliable throughout the post closure care period (Section I and Section H, Post Closure Plan). The potential for human exposure and subsequent future exposure via the groundwater pathway will be minimized at the facility as a result of proper engineering/design/operating controls and procedures implemented through and further described in detail in the Closure and Post Closure Plans.

Other potential exposure pathways (described previously) could conceivably contribute to potential human exposure in addition to groundwater. The potential for human exposure via these pathways, however, are extremely remote and will have also been minimized at the facility through proper engineering/design/operating controls and procedures described above.



POST CLOSURE FINANCIAL ASSURANCE

Post closure cost estimates herein provided assume that sampling requirements of the original permit have been completed and are no longer required. Therefore, post closure care for the remainder of the duration of the permit will be limited to periodic inspections and maintenance of the facility as specified in this revised permit application in compliance with 40 CFR Section 264.15.

MAINTENANCE AND INSPECTION COST ESTIMATES

Security Lighting:

18.00 per month = 216.00 per year = 2,376.00 to end of permit

Weed control, mowing (in season) and inspection to be performed every three weeks year round:

\$40.00 per time = \$600.00 per year = \$6,600.00 to end of permit

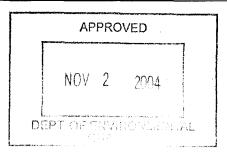
TOTAL \$ 8,976.00 \$ 1,795.20 (plus 20%) \$10,771.20

FINANCIAL ASSURANCE

AGROMAC proposes the following alternatives:

- 1. Annually post a bank irrevocable letter of credit with the amount reduced each year to reflect the actual remaining period of the permit and adjusted in accordance with 40 CFR Section 264.15.
- 2. \$10,771.20 to remain in the existing trust account. This would require consent of the United States Environmental Protection Agency.





WASTE ANALYSIS

The waste-acid evaporation pond was discontinued from service in June, 1984. Since that time considerable sampling and testing has been done on the pond sediments, underlying and surrounding soils, and the groundwater in the vicinity. Also, samples of the waste acid from the galvanizing plant were taken and analyzed. The results of the testing and a description of the methods and procedures used for sampling and testing are presented below.

Evaporation Pond Sediments, Clay Liner, Underlying Soils and Adjacent Soil Borings

(This section is taken from the Post Closure Permit Application for Waste Acid Evaporation Pond, EPA I.D. No. NED 044101442, HWS Technologies, Inc., October, 1989). Samples of the pond sludges, clay liner and underlying soils were obtained between June 30 and July 12, 1984. Each of the cells was divided into four equal quadrants. A minimum of five (5) locations in each quadrant were selected at random for sample collection. At each of the selected locations, representative samples of each vertical foot of sludge from the top of the existing sludge to the bottom soil and sediment were collected.

In general, samples were obtained by hand excavating the top 1 to 2 feet of material where possible and then driving a modified "Shelby Tube" type core sampling device into the remaining depth of sludge. The tube was driven until the lower soil and sediments would seal or plug the end of the tube allowing for extraction from the hole.

In sample locations where sludges were extremely hard, the top 1 to 2 feet were hand excavated and then the remaining depth was sampled using a gas-driven power type continuous flight auger. All of the sample locations in the south cell (Cell No. 1) were very hard and dry and the auger method was used.

The samples collected were dark brown, yellow, white to blue-green in color. Moisture concentrations for the samples varied from very dry and hard in the south cell to damp and wet in the north cell. The samples from each of the locations in each quadrant were then composited and analyzed.

Auger borings of soil surrounding the site were also obtained in June, 1984. These were conducted according to ASTM Designation D 1452-65 (Revised 1980) and sampling was done by split-barrel sampler in conformance with ASTM Designation D 1586-67.

RCRA Chain of Custody requirements for sampling and transporting were followed for all soil samples taken from the evaporation pond and from the surrounding bore holes. Laboratory analysis of EP Toxicity and Total Metals were done according to standard methods.

Tables 1, 2, 3, 4, & 5 contain the analytical results from analysis of the waste acid, bore hole soil samples, and the evaporation pond soil samples (HWS Technologies, Inc., Post Closure Permit

Application, October, 1989). These results were presented in the Supplemental Report to the Hydrogeologic Investigation, dated January 4, 1985.

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HWS TECHNOLOGIES INC. ANALYTICAL SERVICES

Telephone (402) 475-4241

825 J Street

P.O. Box 80358

Lincoln, Nebraska 68501

DATE: June 6.4 AUTH.: 84/3937

REPORT NO.: 86702

FOR:

Lockwood Corporation Box 160, E. Hwy #92 Gering, Nebraska 69341

ATTN: Mr. Roy Dugan

1 cc. Roy Elliott, HWS

1 cc. Gary Brandt, HWS

JOB NUMBER: 86-2005

DATE RECEIVED: 3-8-86

CLIENT/FIELD IDENTIFICATION: None Given (Galv. Waste Sulfuric Acid)

LABORATORY IDENTIFICATION NO.: 20547

Analysis	Units	Concentration	Book/Page	Analyst
Physical Properties				
рН	S.U.	< 1	78/86013	RW
Nonfilterable Residue	mg/L	184	80/86008	RW
Metals, Total				
Cadmium	mg/L	20	10/86002	RW
Chromium	mg/L	< 0.05	12/86003	RW
Copper	mg/L	2.0	14/86001	
Lead				RW
- · · · · · · · · · · · · · · · · · · ·	mg/L	28.0	24/86002	RW
Nickel	mg/L	1.00	23/86002	RW
Silver	mg/L	< 1	3/86001	RW
Zinc	mg/L	67,500	32/86004	RW
Organics				
0il and Grease	mg/L	< 5	68/86006	SS

Analyses were performed in accordance with EPA 600/4-79-020, Methods for Chemical Analysis of Water and Wastes.

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By Salmith

TABLE 1

SUMMARY OF EP TOXICITY ANALYSES LOCKWOOD CORPORATION SITE BORE HOLES

				16004	16805	Conce 16806	ntration 16807	16818	
LAB I.D. N	lo.	16801	16803	16804	10003			_	
Bore Hole I.D. (Depth, ft)		B1-A (9.0'-10.0')	B1-C (13.0'-14.0'	B1-D) (15.5'-16.5')	B3-A (3.5'-4.0')	B3-B (10.5'-11.0')	(9.5'-20.0')	85-D (10.0°-11.0	DEPT
Parameter	Unit								
EP Toxicity Me	tals				. 0. 005	< 0.005	< 0.005	< 0.005	P 2 2004 FENVIRONMENTAL
Arsenic	mg/1	< 0.005	< 0.055	< 0.005	< 0.005 < 0.5	< 0.5	< 0.5	< 0.5	크
Barium	mg/1	<0.5	< 0.5	< 0.5	0.0 10	0.030	0.040	< 0.005	700 MM
Cadmium	m g/1	< 0.005	< 0.005	< 0.005 0.10	< 0.05	0.07	0.05	< 0.05	
Chromium	mg/1	< 0.05	< 0.05	< 0.10	< 0.1	< 0.1	< 0.1	< 0.1	· Z
Lead	mg/l	< 0.1	<0.1 <0.005	<0.005	< 0.005	< 0.005	< 0.005	< 0.005	<u> </u>
Mercury	mg/]	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	.1
Selenium	mg/1	<0.005 0.1	0.1	0.1	0.1	0.1	0.1	0.1	AL-M-P-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Silver	mg/l mg/l	0.05	1.5	1.7	120	230	1200	2.9	•
Zinc	mg/ı	0.03	2.0	•					
LAB I.D. No) . .	16830	16836	17078	17079	17080	17081	17082	RCRA MAX.
Bore Hole I.D. (Depth, ft)		B7-C (10.0'-11.0')	B8-C (7.5'-8.5')	B-12 (7.5'-26.0')	B-13 (7.5'-25.9')	B-14 (8.1'-28.0')	8-15 (4.8'-22.5')	B-16 (7.0'-18.0')	CONTAMINANT LEVEL
Parameter	Unit								·
	.1.					•			5.0
EP Toxicity Met	115 1119/1	<0.005	<0.005			Not Determined		<0.5	100.0
Arsenic Barium	mg/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 <0.005	<0.005	1.0
Cadmium	mg/1	<0.005	0.005	<0.005	<0.005	<0.005 0.13	<0.05	0.14	5.0
Chromium	mg/1	<0.05	<0.05	<0.05	<0.05	<0.13 <0.1	<0.1	<0.01	5.0
Lead	mg/1	<0.1	<0.1	<0.1	<0.1 <0.005	<0.005	<0.005	<0.005	0.2
Mercury	mg/1 mg/1	<0.005 <0.005	0.007 <0.005	<0.005 <0.005	<0.005	0.025	0.005	<0.005	100 5 0
Selenium Silver Zinc	mg/1 mg/1	0.1 2.3	0.1 0.19	0.05	0.04	Not Determined 0.05	0.03	0.04	
	•		•	•	•				



SUMMARY OF SELECTED TOTAL METALS ANALYSES LOCKWOOD CORPORATION SITE BORE HOLES

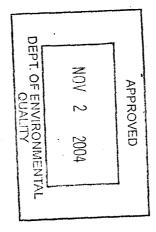
			Concent	ration .			
LAB I.D.	LAB I.D. No.		17079	17080	17081	17082 B-16 (7.0'-18.0')	
Bore Hole I.D. (Depth, ft)		B-12 (7.5'-26.0')	B-13 (7.5'-25.9')	B-14 (8.1'-28.0')	B-15 (4.8'-22.5')		
Parameter	Unit						
Cadmium	mg/1	0.005	0.007	<0.005	<0.005	<0.005	
Chromium	mg/l	1.65	1.55	2.00	1.56	1.56	
Chromium Hexavalent Lead Mercury	mg/l mg/l mg/l	<0.05 2.04 0.011	0.12 2.98 <0.005	0.15 2.38 0.005	0.05 2.32 0.007	<0.05 1.93 <0.005	



SUMMARY OF EP TOXICITY ANALYSES LOCKWOOD CORPORATION EYAPORATION PITS I & II

			Concentration Evaporation Pit I - Composites							Concentration Evaporation Pit II - Composites				0004			
LAB I.D. No. Parameter Unit	No. Units	17005	17006	17007	17008	17009	17010	17011	17012	16793	16794	16795	16796	16797	16798	16799	PERA HAX. PERMISSIBLE LIMITS
Arsenic Barium Cadmium Chromium Lead Mercury Selenium Silver Zinc	mg/l mg/l mg/l mg/l mg/l mg/l mg/l	<0.5 0.015 <0.05 <0.1 <0.005	<0.005 <0.5 0.015 <0.05 <0.1 <0.005 <0.005 <0.1 200	0.024 <0.5 0.008 0.10 0.24 <0.005 <0.005	0.006 <0.5 0.005 <0.05 0.24 <0.005 <0.005	0.015 <0.5 0.025 <0.05 <0.1 <0.005 <0.005 0.20	0.041 <0.5 0.015 <0.05 <0.1 <0.005 <0.005 <0.1 210	<0.005 <0.5 0.010 <0.05 0.12 <0.005 <0.005 <0.1 150	<0.5 0.025 0.13 3.8 <0.005	<0.005 <0.5 0.035 0.20 1.1 <0.005 <0.005 <0.1	<0.005 <0.5 0.020 <0.05 <0.1 <0.005 <0.1 660	<0.005 <0.5 0.030 <0.05 <0.1 0.12 <0.005 <0.1 980	<0.005 <0.5 0.020 0.08 <0.1 <0.005 <0.005 <0.1 520	<0.005 <0.5 0.025 0.12 <0.1 <0.005 <0.005 <0.1 930	<0.005 <0.5 0.015 <0.05 <0.1 <0.005 <0.005 <0.1 340	<0.005 <0.5 0.030 0.12 1.3 <0.005 <0.005 0.2 1300	5.0 100.0 1.0 5.0 5.0 0.2 1.0

^{*} Description of Lab I.D. Nos - See Attached Page



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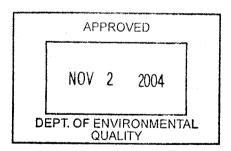
SUMMARY OF COMPOSITE SOURCES

		LOCI	WOOD EVAPO	RATION PIT	#I	· · · · · · · · · · · · · · · · · · ·	
17005	17006	17007	17008	17009	17010	17011	17012
IA-1 (1'-2')	IA-15 (4'-5')	IB-1 (1'-2')	IB-15 (4'-5')	IC-1 (1'-2')	IC-15 (4'-5')	ID-1 (1'-2')	ID-15 (4'-5')
IA-2 (2'-3')	IA-5 (4'-5')	IB-2 (2'-3')	IB-4 (4'-5')	IC-2 (2'-3')	IC-4 (4'-5)	10-8/25 (3'-4')E	ID-4 (4'-5')
IA-3 (2'-3')	•	IB-3 (3'-4')	IB-5 (5'-6')	IC-3 (3'-4')	IC-5 (5'-6')	10-8/DE (3'-4')E	(5'-6')
IA-4 (3'-4')		IB-11 (0'-1')		IC-11 (0'-1')		ID-11 (0'-1')	ZE
IA-11 (0'-1')		IB-12 (1'-2')		IC-12 (1'-2')		ID-12 (1'-2')	2 2004 ENVIRONMENTAL QUALITY
IA-12 (1'-2')		IB-13 (2'-3')		IC-13 (2'-3')		ID-13 ∂ (2'-3')¾	
IA-13 (2'-3')		IB-14 (3'-4')		IC-14 (3'-4')		ID-14 (3'-4')	NOV DEPT. OF
IA-14 (3'-4')						P September 1	
		LOC	KWOOD EVAPO	RATION PIT	#11		
16793	16794	16795	16796	16797	16798	16799	16800
IIA-11 (0'-1')	IIA-15 (4'-5')	IIB-1 (0'-1')	IIB-5 (4'-5')	IIC-1 (0'-1')	IIC-5 (4'-5')	IID-1 (0'-1')	IID-5 (4'-5')

							-
16793	16794	16795	<u>16796</u>	16797	16798	16799	16800
IIA-11 (0'-1')	IIA-15 (4'-5')	IIB-1 (0'-1')	IIB-5 (4'-5')	IIC-1 (0'-1')	IIC-5 (4'-5')	IID-1 (0'-1')	IID-5 (4'-5')
IIA-1 (0'-1')	1IA-5 (4'-5')	IIB-11 (0'-1')	IIB-15 (4'-5')	IIC-11 (0'-1')	IIC-15 (4'-5')	IID-11 (0'-1')	IID-15 (4'-5')
IIA-12 (1'-2')		IIB-2 (1'-2')		IIC-2 (1'-2')		IID-2 (1'-2')	
IIA-2 (1'-2')		IIB-12 (1'-2')		IIC-12 (1'-2')		IID-12 (1'-2')	
IIA-13 (2'-3')		IIB-3 (2'-3')	•	IIC-3 (2'-3')	,	IID-3 (2'-3')	
IIA-3 (2'-3')		IIB-13 (2'-3')		IIC-13 (2'-3')	•	IID-13 (2'-3')	
IIA-14 (3'-4')		IIB-4 (3'-4')	•	IIC-4 (3'-4')		IID-4 (3'-4')	
IIA-4 (3'-4')		IIB-14 (3'-4')	• .	IIC-14 (3'-4')		IID-14 (3'-4')	

Table 5

APPENDIX A CLOSURE PLAN



CLOSURE PLAN FOR LOCKWOOD CORPORATION WASTE ACID EVAPORATION POND EPA I.D. NO. NED044101442

IN ACCORDANCE WITH:

U.S. ENVIRONMENTAL PROTECTION AGENCY

RESOURCE CONSERVATION AND RECOVERY ACT

HAZARDOUS WASTE MANAGEMENT RULES AND REGULATIONS

40 CFR PARTS 264 & 265, SUBPARTS G & H

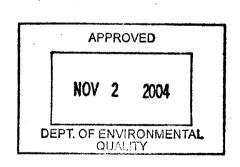
AND

NEBRASKA DEPARTMENT OF ENVIRONMENTAL CONTROL
RULES AND REGULATIONS GOVERNING HAZARDOUS WASTE MANAGEMENT
RULES NO. 30 & 31

JULY 1985

REVISED

SEPTEMBER 1985



PREPARED BY:

HOSKINS-WESTERN-SONDEREGGER, INC. 825 J STREET LINCOLN, NEBRASKA 68501

CLOSURE PLAN

TABLE OF CONTENTS

INT	TRODUCTION	PAGE
PART A:	GENERAL	2
PART B:	FACILITY CONDITIONS	4
PART C:	SCHEDULE OF FINAL FACILITY CLOSURE	9
PART D:	FACILITY INVENTORY	10
PART E:	TREATMENT OF FACILITY INVENTORY	11
PART F:	FACILITY DECONTAMINATION	18
PART G:	CLOSURE CERTIFICATION	19
PART H:	FACILITY FENCING	20
PART I:	COST ESTIMATE FOR FACILITY CLOSURE	21
PART J:	FINANCIAL ASSURANCE	22

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. . . APPENDIX . . .

ATTACHMENTS

ATTACHMENT I: WASTE ACID EVAPORATION POND LOCATION MAP

ATTACHMENT IIa: PLAN - WASTE ACID EVAPORATION POND

ATTACHMENT IIb: WASTE ACID EVAPORATION POND CROSS-SECTIONS

ATTACHMENT III: FINANCIAL ASSURANCE DOCUMENTS

ATTACHMENT IV: CERTIFICATION OF FINAL CLOSURE



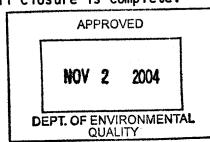
INTRODUCTION

Lockwood Corporation proposes to close the waste acid evaporation pit facility at the Lockwood Corporation plant in the fall of 1985. Lockwood will close the facility in accordance with 40 CFR 265.111 and in a manner that (a) minimizes the need for further maintenance, and (b) controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post closure escape of hazardous waste, hazardous waste constituents, leachate, or waste decomposition products to the ground or surface waters or to the atmosphere.

In general, the closure of the facility will be completed in the following manner:

- 1. Removal of liquid, if present.
- Demolition of existing dikes and removal of influent waste line.
- 3. Placement of lime and soil layer.
- 4. Installation of impermeable synthetic liner.
- Placing and compacting clay soil cover and gravel stabilizing layer.
- 6. Installing security fence.

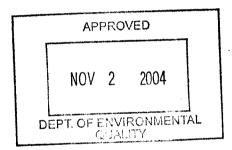
Closure of the facility will be initiated after approval by the Nebraska Department of Environmental Control (NDEC) and after the required public notice period has ended. Financial assurance will be provided and will continue to be provided until closure is complete.



Also, Certification of closure will be provided as required by the be disposed of at an approved hazardous waste disposar size.

Groundwater monitoring of the facility will continue during theory are nariod for facility. regulation. If any wastes are to be removed from the site, such wastes will be disposed of at an approved hazardous waste disposal site.

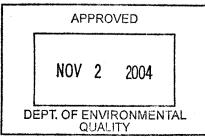
post-closure care period for facility.



CLOSURE PLAN

A. GENERAL

- Lockwood will keep a written Closure Plan at the Lockwood Corporation Plant, (site of Waste Acid Evaporation Pond,) until all closure operations are completed, after which the Plan will become part of the Plant's permanent records.
- 2. The Plant Engineer (or other facility employee as designated by Lockwood) will be responsible for: maintaining the Plan; revising and updating the Plan as necessary; and, implementing the Plan at the time of Facility closure.
- 3. Records of Closure Plan revisions and updates will be retained at Lockwood for the care period of Closure and Post Closure. However, this retention period is automatically extended during the course of any unresolved enforcement action regarding the facility or as requested by the EPA Region VII Administrator or the Director of the Nebraska Department of Environmental Control (DEC).
- 4. The Closure Plan and related records will be furnished upon request and made available at all reasonable times for inspection by any officer, employee, representative, or designee of either the EPA or the Nebraska DEC.
- 5. Any revisions to the approved Closure and Post Closure Plan will be submitted to and approved by the Director of the Nebraska DEC and EPA Region VII Administrator.



6. The Regional Administrator can be contacted by writing:

United States Environmental Protection Agency

Region VII

324 East 11th Street,

Kansas City, Missouri 64106

7. The Director of the Nebraska DEC can be contacted by writing:

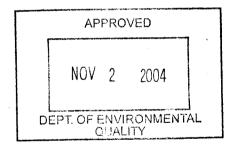
State of Nebraska

Director, Department of Environmental Control

301 Centennial Mall South

Lincoln, Nebraska 68509

8. It is the intention of this Closure Plan to meet the "Closure Performance Standard" as stated in 40 CFR 265.111.



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B. FACILITY CONDITIONS

- General Facility Information:
 - a. The Lockwood Corporation plant is located on the southeast corner of the City of Gering, Scottsbluff County, Nebraska in the SEŁ of Section 1, Township 21 North, Range 55 West of the 6th P.M. Based upon Flood Insurance Rate Maps available for Scottsbluff County through the Federal Emergency Management Agency, none of the waste acid evaporation pond lies in the 100-year flood plain.

The plant property is presently surrounded by agricultural land on the south and east sides, and industrial property on the west side and industrial and State Highway 92 on the north side. Attachment I is a Location Map showing approximate plant and Facility locations with respect to contours, highways and roads, etc.

b. The subject of this Closure Plan, the Waste Acid Evaporation Pond Facility, is located southwest of the Galvanizing Building from which the acid waste is generated. The Facility consists of two (2) cells with a common dike separating the cells. The bottom dimensions of the south (Cell #1) and the north (Cell #2) are approximately 100 ft x 90± ft and 100 ft x 100 ft, respectively. Interior and exterior dikes have side slopes of 3:1.

Construction records indicate that the north cell was constructed with a mixed soil and bentonite liner on the bottom and to an elevation of 3 feet above the bottom on the sloped

interior surfaces of the dikes. It is assumed that the south cell was unlined since no records were available on this cell and test borings were unable to determine the presence of a liner.

The south cell was placed into service in November 1972 and received wastes until February of 1978 at which time the north cell was constructed and placed into operation. The north cell received wastes from this time until June, 1984, when the discharges to the cell were stopped, as requested by Administrative Order.

In general, the wastes discharged to the cells consisted of a 5% to 15% solution of waste sulfuric acid from the corporations galvanizing process located in the galvanizing building. Typically the facility received an average of two (2) "batch type" discharges per month. The volume of an average discharge ranged between 5,000 to 8,000 gallons. The calculated capacity of the north cell was approximately 375,600 gallons and the south cell capacity was approximately 308,500 at an average liquid depth of 4.0 ft.

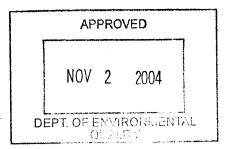
Since that time, all other waste acid from the galvanizing process has been shipped to an Oklahoma hazardous waste disposal site.

c. The Waste Acid Evaporation Pond Site Layout Plan with respect to adjacent buildings and structure, and the site elevation and estimated soils profile are shown in Attachments IIa. and IIb.

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2. Waste Characterization:

- a. Lockwood Corporation initiated and conducted an extensive waste monitoring, sampling, and analysis program aimed at identifying the waste constituent concentrations and locations.
- b. The primary waste stream to the Facility was waste sulfuric acid generated by the galvanizing process. Besides having an extremely low pH (Less than 2.5), the waste has high concentrations of zinc, iron, and sulfates, with lesser concentrations of lead, cadmium, chromium, sodium, and chlorides. No other known wastes have been discharged to the Facility in any significant or detectable quantities. The waste stream is classified K062 as defined by 40 CFR 261.
- c. Based upon waste sampling and analyses in and around the Facility, it has been determined that there are three general areas of waste concentration with varying degrees of contamination. These are described as follows:
 - 1.) Facility Bottom Sludges. As previously mentioned, the Facility presently contains a 2.5 to 3.0-foot layer of dry sludge resulting from accumulated precipitate and sediment from the waste stream. Samples of the bottom sludges were obtained between June 30 and July 12, 1984. Each of the cells were divided into four equal quadrants. A minimum of five (5) locations in each quadrant were selected at random for sample collection. At each of the selected locations representative samples of each vertical foot of sludge from the top of the existing sludge to the bottom soil and sediment were collected.

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In general, samples were obtained by hand excavating the top 1 to 2 feet of material where possible and there driving a modified "Shelby Tube" type core sampling device into the remaining depth of sludge. The tube was driven until the lower soil and sediments would seal or plug the end of the tube allowing for extraction from the hole.

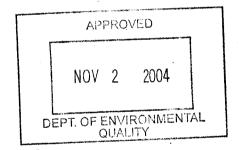
In sample locations where sludges were extremely hard, the top 1 to 2 feet were hand excavated and then the remaining depth was sampled using a gas-driven power type continuous flight auger. All of the sample locations in the south cell (Cell No. 1) were very hard and dry and the auger method was used.

The samples collected were dark brown, yellow, white to blue-green in color. Moisture concentrations for the samples varied from very dry and hard in the south cell to damp and wet in the north cell. The samples from each of the locations in each quadrant were then composited and analyzed as shown in Attachment III of the Appendix of this closure plan document.

These results indicate that all the samples contain characteristic E.P. Toxicity Metals concentration levels well below those established for hazardous waste. However, due to current RCRA regulations, these wastes are classified as KO62 hazardous wastes.

The Facility bottom sludge will be included in the "waste inventory" for this Closure Plan.

- 2.) Contaminated Site Soils. Soils beneath the Facility will be addressed by the "Post Closure Plan" and will not be included in the waste inventory of the Closure Plan.
- 3.) Groundwater. Groundwater in the area of the Facility also will be addressed by the "Sampling and Analysis" plan for groundwater as outlined in the Post Closure Plan and will not be included in the waste inventory of the Closure Plan.

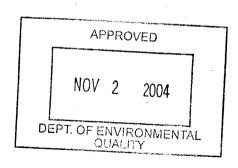


C. SCHEDULE OF FINAL CLOSURE

1. The projected schedule for final closure of the Lockwood Waste Acid Evaporation Pond shall be in accordance with the following. The days stated for each item are the number of days after receiving approval of the closure plan from NDEC.

		Days After			
	Item	Date of Approval			
a.	Start of Closure Operations	30			
b.	Complete Closure	180			
c.	Certify Closure	210			

2. The Facility Owner or his designated representative may amend the project closure schedule at any time during the active life of the facility. Any revisions to the closure plan will be submitted to and approved by the Director of the Nebraska D.E.C.



PROPOSED TO

D. FACILITY INVENTORY

- In accordance with the R.C.R.A. regulations for Closure Plans, the maximum amount of waste inventory on-site at the Facility shall consist of the Facility Bottom Sludge. In general, the Facility sludge and soils are described as follows:
 - a. Sludge: Dark gray, white, or yellow or blue-green in color with some light brown (iron) areas and layers; crystalline structure when dry and very soft in consistency when moist to wet with no developed soil structure.
 - b. Soils: Silty clay, possibly some sandy clay, dark brown in color when wet, stiff in consistency and wet, with a well developed soil structure.
- 2. Any water standing in the pit at the time of closure shall not be considered part of the waste inventory, and shall be pumped to disposal site containers for disposal at an approved hazardous waste site prior to the start of closure operations.
- 3. Based on the sludge samples collected, sludge depths averaged 2.8 feet deep in the south cell and 3.0 feet deep in the north cell.
- 4. In addition, it will be assumed that approximately 2.0 feet of soil on the Facility's sides and bottom and the total inner dike soil are contaminated sludge. Thus, the total calculated waste inventory volume shall be assumed to be a maximum of 5,100 cubic yards.



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TREATMENT OF FACILITY INVENTORY

The following is a step-dy-socrethat will be taken in closing the Facility. A general content to the by Lockwood Corporation will perform the work described in this state.

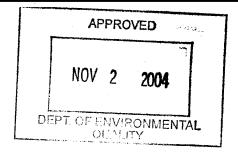
If present in the Facility, standing water will be removed by pumping and discharging to the existing Neutralization Tank.

Demolish Existing Earth Dikes. 2.

Existing exterior and interior dikes will be demolished by pushing in the dikes over top of the existing sludge. existing waste acid inlet pipe line will be removed to 10 feet outside of the exterior dike and plugged and abandoned.

Construction of Alkaline/Soil Layer 3.

A layer of lime followed by compacted clay soil will be placed over the top of the sludge and pushed-in-dike material to ensure alkaline (high pH) conditions are maintained above the existing sludge deposits and dike area. Hydrated lime will be spread at the rate of 200 lbs. per 1000 square feet over the top of the sludge in the both cells and and the interior dike (approximately 130 feet x 250 feet area). The lime layer will then be covered by a 6-inch to 1.0 foot thick compacted layer (approx.) of silty-clay (non-dispersive) soil. The surface of this layer will be uniformly sloped and smooth graded to the lines and grades shown in Attachment II of the Appendix.



4. Final Cover

a. <u>Final Cover</u> The area of the facility to be covered consists of the area bounded by the exterior dikes of the two cells. The dimensions of this area is approximately 130 feet wide (East-West) by 250 feet long (North-South).

b. Cover Characteristics

- The final cover will be sloped and consist of the following materials to prevent surface water infiltration and pooling:
 - a) Impermeable synthetic top liner
 - b) Protective compacted clay soil cover layer over the synthetic liner
 - c) Gravel stabilizing final surface layer

2) Materials

a) Synthetic Liner. The synthetic liner will be a commercially available 20 mil thick (0.020 inch) polyvinyl chloride (PVC). The liner will be black in color and be fabricated in two (2), 70 feet x 260 feet (approx.) pieces. The liner material is resistant to degradation from the alkaline soils that will be used for the cover operation.

b) <u>Cover (Fill) Soil.</u>

(1) The soil to be used for the cover over the liner will be a silty-clay obtained from a local off-site borrow pit. The material will be a non-dispersive inorganic silty-clay material free of refuse, stones or clods larger that 3 inches maximum dimension, vegetation and other perishable material. Haul distance from the borrow pit to the Facility Site is approximately 5 miles.

- material will be determined by using the standard "Crum Test" (Ref: USDA Soil Conservation Service, Soil Mechanics Note 8 and ASCE Journal of Geotechnical Engr., April, 1976. Compaction characteristics will be evaluated using ASTM §9American Society of Testing Materials) method D1557.
- liner will range between 1.5 feet to 2.0 feet to protect the liner from ultraviolet light and physical damage from construction equipment or other possible sources. The surface will be sloped to the contour elevations as shown on the Plan and Cross-sections of Attachment II in the Appendix. Approximately 3,000 cubic yards of material will be required for the cover layer. The permeability of the compacted cover layer is estimated to range between 10⁻⁵ cm/sec. to 10⁻⁷

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cm/sec.

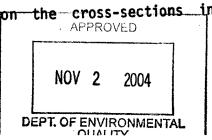
c). Gravel. Gravel for the final stabilization layer on top of the soil cover will have a size range of one (1) to two (2) inches and will be obtained from locally available sources. A two (2) inch thickness will be applied over the total area of the cover.

c. Final Cover Design.

- 1) The design of the cover is shown in Attachment II of the Appendix to this Closure Plan.
- 2) Slope. The slope of the cover will be a minimum of 2% on the top area and four (4) foot horizontal to one (1) foot vertical around the perimeter of the exterior dikes.
- 3) Length of Run on Slope. The maximum length of run at the 2% slope will be approximately 70 feet.

d. Procedures for Placing and Installing Final Cover.

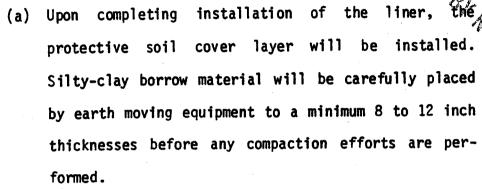
- 1) Synthetic (PVC) Liner Placement.
 - (a) Prior to placing the synthetic liner, the top of the lower alkaline-soil layer will be graded smooth to the 2% slope shown and inspected to be free of roots, stones, rocks and other sharp or angular objects.
 - (b) The two pieces of synthetic liner will be placed in the longitudinal, north-south direction. The seam at the north-south centerline of the two cells will be overlapped approximately 5 feet to prevent entry of seepage water. The perimeter edges of the liner will be anchored (keyed) into the existing exterior earthen dikes as shown on the cross-sections in



- 14-

Attachment II. Temporary soil ballast will be placed at selected locations to prevent displacement by wind until placement of final cover, if required.

2) Protective Soil Cover.



- (b) Compaction of the soil will be accomplished in 8 to 12 inch layers by compaction rollers and earth spreading equipment. The soils will be wetted or dried by aeration, if required, and compacted to the specified limits stated herein.
- (c) Cover shall be placed to a 1'-4" thickness over the liner and to the surface contour elevations and slopes shown on Attachment II. The final surface shall be graded smooth to prevent ponding.
- (d) Soil Testing. Soil tests will be performed on each lift of soil cover material placed to ensure the degree of compaction as stated herein after is met.
- 3) Gravel Stabilization Layer. A final 2 inch thick (minimum) layer of gravel will be uniformly placed over the top of the soil cover and exterior surface of the dikes to the limits shown in Attachment II. Additionally, periodic

inspection of the facility will be conducted during the closure period and if any deterioration of cover occurs, it will be repaired using similar materials to the conducted during the closure period and if any deterioration of cover occurs, it will be repaired using similar materials.

5. Soil Compaction and Testing

a. Degree of Compaction.

1) All fill and soil cover will be compacted to meet the following limits:

•		Minimum Degree
Material	Moisture Content	of Compaction
Silty Clay	Near Optimum	82% of Maximum
		Dry Density

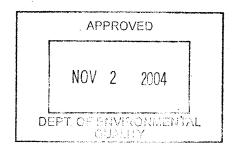
These materials will be moistened or dried, if necessary, and compacted so that each layer meets the moisture content and degree of compaction stated above.

b. Soil Testing

- Soil tests for moisture and degree of compaction will be performed by qualified soils testing personnel on each 8-inch lift of soil placed and compacted.
- 2) A minimum of two (2) soil compaction tests will be performed for each 6-inch compacted lift. Soil tests will be performed in accordance with approved test methods.
- 3) Compacted fill and soil cover that does not meet the requirements will be reworked or removed and properly replaced.

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- 6. The type and minimum number of pieces of equipment expected to perform closure operations shall be as follows:
 - a. 1 Front End Loader Rubber Tired Type
 - b. 1 Compactor Roller Type
 - c. 1 Motor Grader
 - d. 8 Dump Trucks for Borrow Soil Hauling
- 7. The schedule for the above mentioned closure operations shall be as outlined in Section C of this Plan.

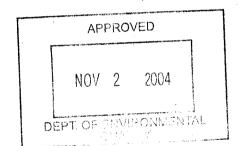


F. FACILITY DECONTAMINATION

OF NOTED

Due to the nature of this Closure operation and the relatively low hazard of the wastes involved, limited decontamination of the equipment used for closure will be as follows:

- 1. Equipment.
 - will be physically scraped and brushed clean of waste materials at the Facility site each time prior to leaving the areas. This will be done without the use of water. These materials will be disposed of with the other inventory.



G. CLOSURE CERTIFICATION

- ST NOTO
- When closure is completed, Lockwood and an independent registered professional engineer will provide certification as prescribed by 40 CFR 265.115.
- 2. See the Appendix and Attachment for a copy of the form for "Certification of Final Closure".



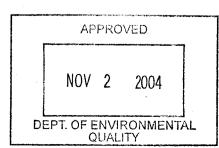
H. FACILITY FENCING

1. Existing Fence.

- a. Galvanized steel chain link perimeter fencing exists along the Lockwood Plant property boundaries. The Facility is bounded on the west and south sides by this fence (See Attachment II).
- b. The existing chain link fence is an 8 foot high industrial security fence with galvanized wire fabric and posts.
- c. The existing fencing is in good condition and will be inspected when post closure begins to ensure that it is in good condition.

2. New Fencing.

- a. New perimeter chain link fencing will be installed along the north and east sides to enclose the Facility. Fencing will be installed at the location shown on Attachment II in the Appendix.
- b. The chain link fencing will be the same as the existing perimeter chain link fencing. An access gate will be installed to allow entrance to the Facility for maintenance and post closure activities. Locks will be installed on the access gate opening.
- 3. Signs. The perimeter property fencing is currently signed. Additional signs as required by the regulatory agency will be installed on the facility perimeter fence at the start of the post closure period.



AL ROSO

I. COST ESTIMATE FOR FACILITY CLOSURE

- 1. An estimate of the cost of closing the Lockwood Corporation Waste Acid Evaporation Pond in accordance with the procedures described herein, is shown in Table 3 to follow.
- 2. The Facility Owner or his designee will prepare a new closure cost estimate whenever a change in the Closure Plan affects the cost of closure. Such changes will be recorded in Table 3.

TABLE NO. 3

OPINION OF PROBABLE CLOSURE COSTS

LOCKWOOD WASTE ACID EVAPORATION PIT

NOV 2 2004
DEPT. OF ENVIRONMENTAL QUALITY

Item	Quantity	<u>Unit</u>	Unit Cost	Estimated* Amount
Excavation of Dikes	400	CY	\$3.00	\$ 1,200
Lime	3.3	TN	\$200	660
Synthetic Liner	32,500	SF	\$0.30	9,750
Clay Soil Cover and Fill, Including Borrow	3000	CY	\$4.00	12,000
Gravel	300	TON	\$7.00	2,100
Soil Testing		Lump Sum	\$1,500	1,500
Fencing	455	LF	\$10.00	4,550
Engineering & Inspection	·	Lump Sum	\$2,500	2,500
Miscellaneous		Lump Sum	\$1,000	1,000
Waste Sampling & Analysis		Lump Sum	\$500	500
Contingency		Lump Sum	\$3500	3500

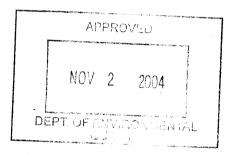
TOTAL: OPINION OF PROBABLE CLOSURE COSTS \$39,260*

The above opinion of closure costs do not include the costs for Ground-water Monitoring. These costs will be covered in the Post Closure Plan, groundwater monitoring plan.

^{*} NOTE: Costs Include Contract Labor and Equipment.

J. FINANCIAL ASSURANCE

 Lockwood will establish financial assurance for closure of the Lockwood Waste Acid Evaporation Pond by one of the methods as described in 40 CFR 265, subpart H.



APPENDIX

APPROVED

NOV 2 2004

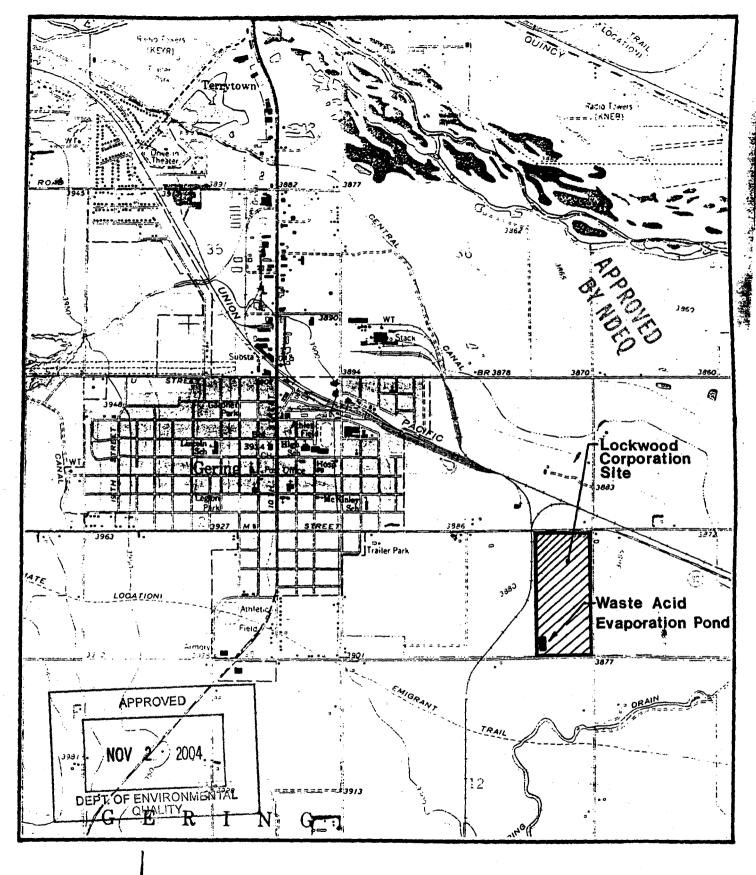
DEPT. OF ENVIRONMENTAL

CLOSURE PLAN ATTACHMENTS

- I. WASTE ACID EVAPORATION POND LOCATION MAP
- IIa. PLAN WASTE ACID EVAPORATION POND
- IIb. WASTE ACID EVAPORATION POND CROSS-SECTION
- IIc. GEOLOGIC CROSS-SECTION
- III. FINANCIAL ASSURANCE DOCUMENTS
- IV. CERTIFICATION OF FINAL CLOSURE



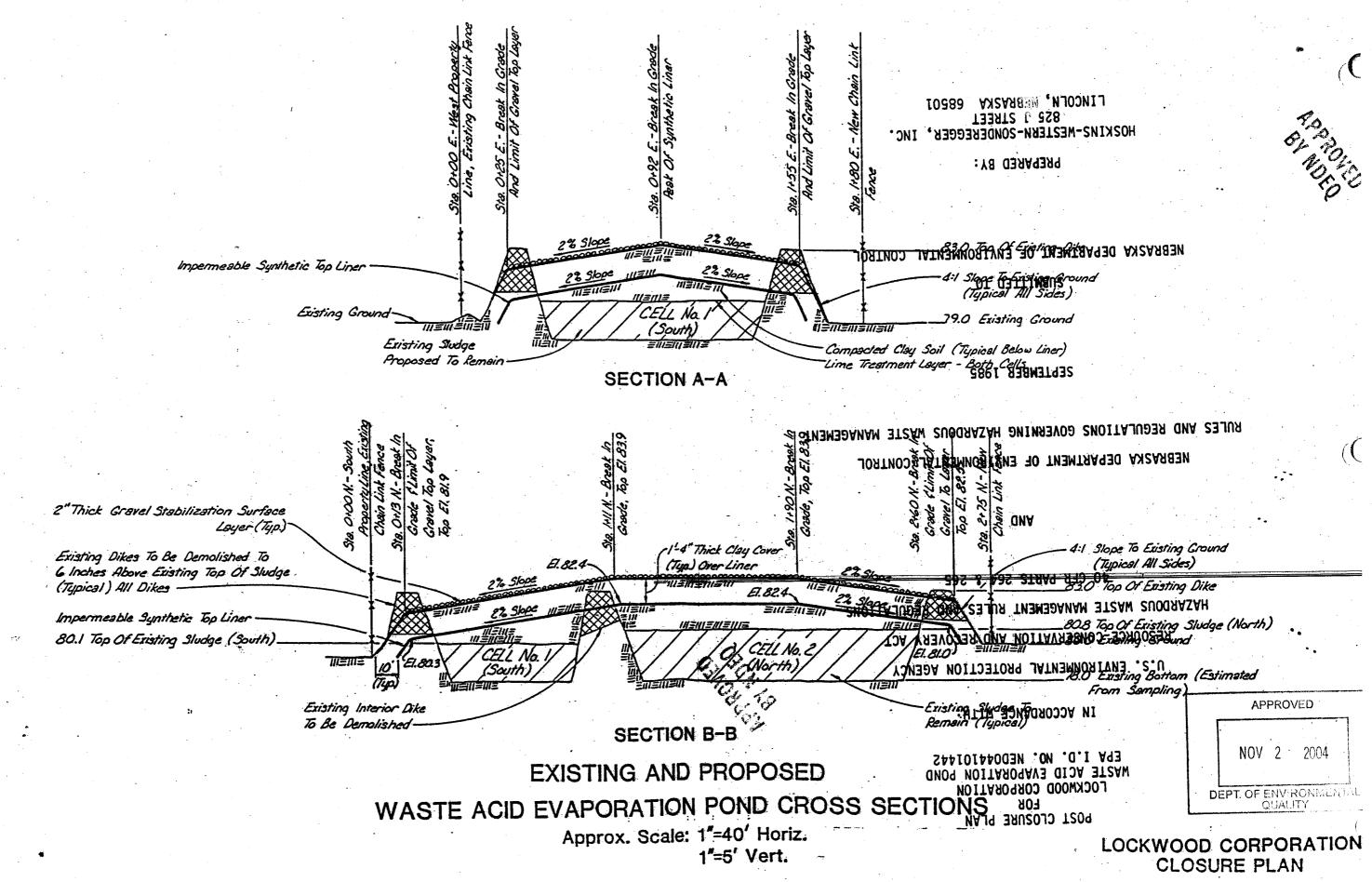
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LOCKWOOD CORPORATION

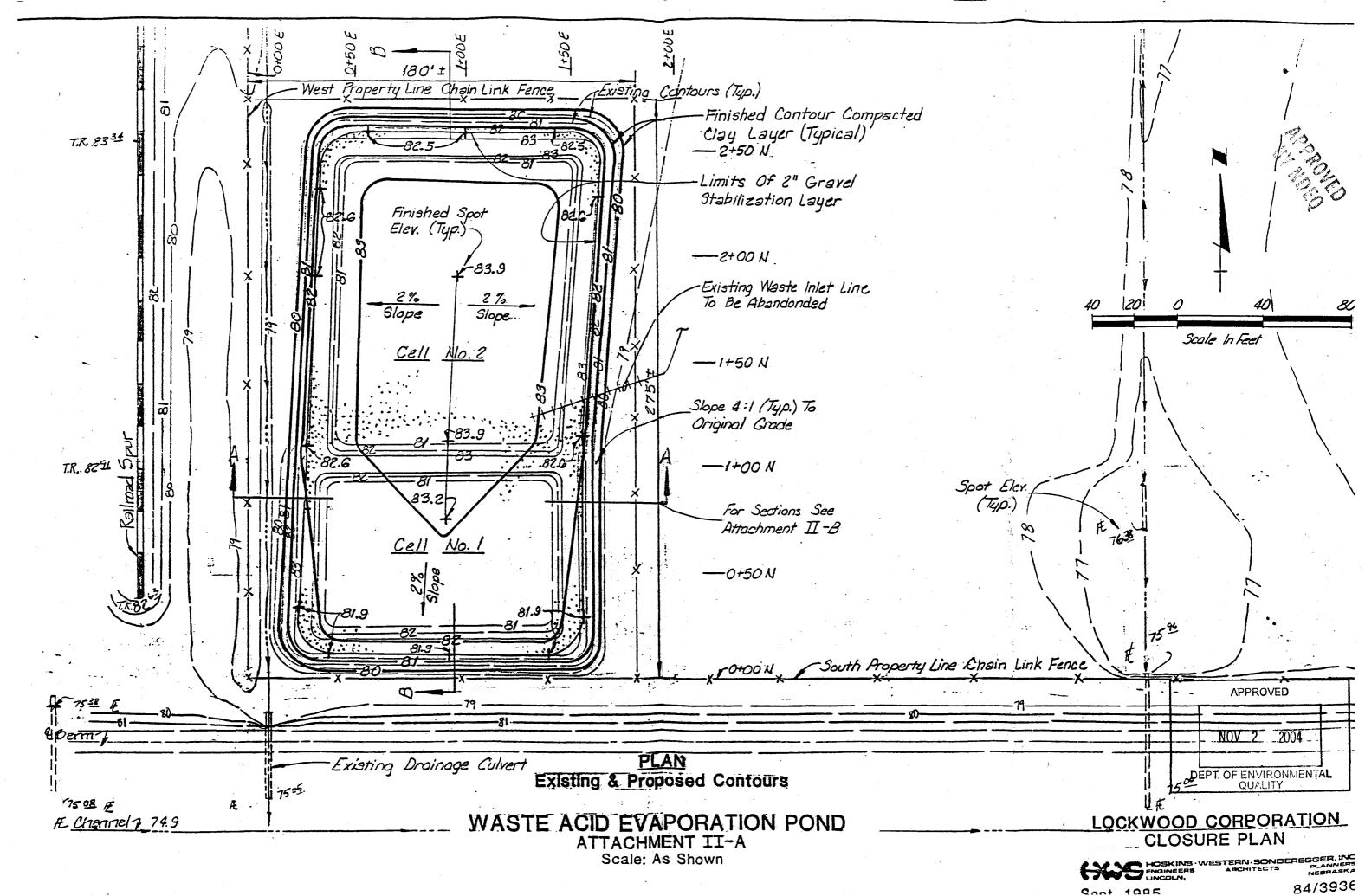
WASTE ACID EVAPORATION POND LOCATION MAP
ATTACHMENT I

SCALE: 1" = 2000'



ATTACHMENT II-B

HOSKINS WESTERN SCHOEREGGER. SLANN REBRAS



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ATTACHMENT III

FINANCIAL ASSURANCE DOCUMENTS

(To Be Included Upon Availability)

NOV 2 2004

DEPT. OF ENVIRONMENTAL QUALITY

LOCKWOOD CORPORATION

TO: Dick White FROM: Roy R. Dugan DATE: June 4, 1988

SUBJECT: Post-Closure Financial Assurance

Below are the current post-closure cost estimates for the remainder of the required 30 year post-closure period:

Sample Collection and shipping	\$1,160.00
Semi-Annual Laboratory Analysis	\$3,840.00
Annual Laboratory Analysis	\$1,440.00
Data Tabulation and Reporting	\$500.00
Site Inspection and Maintenance	\$600.00
YEAR 2 (1988) Total:	\$7,540.00
Year 3 (1989)	\$7,540.00
Year 4 (1990)	\$5,860.00
Year 5 (1991)	\$5,860.00
Years 6 - 30 (25 years) (\$600 / year)	\$15,000.00
	*========
Grand Total:	\$41,800.00

Post-Closure Care cost estimates should be re-evaluated on a periodic basis as actual costs are available for a more accurate analysis.



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CERTIFICATION OF FINAL CLOSURE

OWNER'S CERTIFICATION

I, C.H. McCall , of
(Owner's Name)
Lockwood Corporation, Hwy. 92 East, Gering, Nebraska 69341
(Name and Address of Hazardous Waste Facility)
hereby state and certify that, to the best of my knowledge and belief,
the above-named hazardous waste facility has been closed in accordance
with the attached approved Closure Plan, and that the closure was com-
pleted on the 3rd day of June, 1987.
Marie June 3, 1987 Signature Date
Signature
ENGINEER'S CERTIFICATION
en de la composition br>La composition de la
I, M.C. Schaff , a
(Engineer's Name) certified professional engineer, hereby certify, to the best of my
knowledge and belief, that I have verified all prior closure activities
at Lockwood Corp. Waste Acid Evaporation Pond and
(Hazardous Waste Facility) that I have made visual inspections of the aforementioned facility, and
closure of the aforementioned Facility has been performed in accordance
with the Closure Plan for the Facility approved by the Director of the
Nebraska Danamument of Environmental Control. 5/29/87
्र Meremata : e
License [Schaff, JR. ;] 2351 License [Schaff State of Nebraska License Licens
18 S. Belt My Hwy E. Scottsbluff NE 69361 (308) 635-19
Cartinose Videose City State 7in Dhone No.

AFFIDAVIT

STATE OF NEBRASKA)	
)	SS.
COUNTY OF SCOTTS BLUFF)	

- C. H. McCall, being first duly sworn, deposes and states as follows:
- 1. That he is the President of Lockwood Corporation, a Delaware corporation, whose address is Highway 92 East, Post Office Box 160, Gering, Nebraska 69341.
- 2. In accordance with that certain Lease and Agreement dated September 1, 1968, and pursuant to City of Gering, Nebraska, Industrial Development Revenue Bonds Series A (Lockwood Corporation Project), Lockwood Corporation leases and occupies the following-described real estate:

A part of the Southeast Quarter (SE) of Section One (1), Township Twenty-one (21) North, Range Fifty-five (55) West of the 6th P.M., Scotts Bluff County, Nebraska, more particularly described as follows: Beginning at a point 50 feet South of the Northeast corner of said SE and on the East line of said SE1; thence South on the East line of said SE a distance of 1395.05 feet; thence West and parallel with the North line of said SE a distance of 1253.12 feet to the East right-of-way line of the Union Pacific Railroad track; thence angle right 90°13' along spur right-of-way line a distance of 1395.05 feet to the South right-of-way line of Nebraska State Highway No. 92; thence angle right 89°47' a distance of 1167.01 feet; thence angle right 16°12' a distance of 82.46 feet; thence angle left 106°16' a distance of 23 feet; thence angle right 90°04' a distance of 33 feet to the point of beginning containing 40.0 acres together with improvements and appurtenances thereon and thereunto belonging.

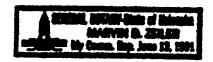
3. There is located on such real estate a waste acid evaporation pond to which the United States Environmental Protection Agency has assigned identification number NED044101442, such pond being located in the southwest corner of such real estate.

NOV 2 2004
DEPT. OF ENVIRONMENTAL QUALITY

	4.	Lockwood	Corpor	ation	has	complied	with	all	laws,	rules and
regulatio	ns ap	plicable	to such	pond	for t	he closure	there	of an		postclosure
care.										62.00
	FURT	HER AFFIA	NT SAITH	NOT.						

LAM.				
	c.	H.	McCall	

SUBSCRIBED AND SWORN TO before me this 1th day of August 1988.



Mari D Jel-Notary Public

My commission expires:

\$10.50 Lockwood Corp

X ST

State of Nebraska, Scotts Bluff County ss.
Entered in Numerical Index and filed for
record the 9 day of August, 1988
at 1:35 o'clock 8 M., and recorded in
Book 121 of Muscellaneous
on page 680
Register of Deeds
By Cauline C. Hay Deputy



AFFIDAVIT

4392

STATE OF NEBRASKA)

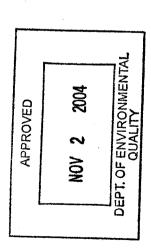
COUNTY OF SCOTTS BLUFF)



Bruce E. Wood, being first duly sworn, deposes and states as follows:

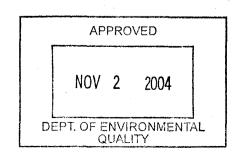
- 1. That he is the President of Lockwood Corporation, a Delaware corporation, whose address is Highway 92 East, Post Office Box 160, Gering, Nebraska 69341.
- 2. In accordance with that certain Lease and Agreement dated September 1, 1968, and pursuant to City of Gering, Nebraska, Industrial Development Revenue Bonds Series A (Lockwood Corporation Project), Lockwood Corporation owns and occupies the following-described real estate:

A part of the Southeast Quarter (SE 1/4) of Section One (1), Township Twenty-one (21) North, Range Fifty-five (55) West of the 6th P.M., Scotts Bluff County, Nebraska, more particularly described as follows: Beginning at a point 50 feet South of the Northeast corner of said SE 1/4 and on the East line of said SE 1/4; thence South on the East line of said SE 1/4 a distance of 1395.05 feet; thence West and parallel with the North line of said SE 1/4 a distance of 1253.12 feet to the East right-of-way line of the Union Pacific Railroad spur track; thence angle right 90 along said right-of-way distance of 1395.05 feet to the South rightof-way line of Nebraska State Highway No. 92; thence angle right 89 deg 47' a distance of 1167.01 feet; thence angle right 16 deg 12' a distance of 82.46 feet; thence angle left 106



deg 16' a distance of 23 feet; thence angle. right 90 deg 04' a distance of 33 feet to the point of beginning containing 40.0 acres together with improvements and appurtenances thereon and thereunto belonging.

- 3. There is located on such real estate a waste acido evaporation pond to which the United States Environmental Protection Agency has assigned identification number NED044101442, such pond being located in the southwest corner of such real estate.
- 4. The waste acid evaporation pond received waste consisting of a 5% to 15% solution of sulfuric acid from the galvanizing process. The waste acid evaporation pond included two cells, each receiving an average of two "batch type" discharges per month, ranging between 5,000 and 8,000 gallons each. The south cell was in service from November, 1972 until February, 1978, and received a total of approximately 832,000 gallons of waste acid (64 months at approximately 13,000 gallons per month). The north cell was in service from March, 1978 until June, 1984, and received a total of approximately 988,000 gallons of waste acid (76 months at approximately 13,000 gallons per month).
- 5. Lockwood Corporation has complied with all laws, rules and regulations applicable to such pond for the closure thereof and for postclosure care, and is operating under provisions of a RCRA Part B Post Closure permit.



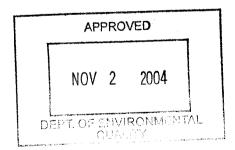
FURTHER AFFIANT SAITH NO	T
	13 2 () ~ Dr.
	Bruce E. Wood
	,
SUBSCRIBED AND SWORN TO before me	this $\frac{1}{1}$ day of $\frac{406}{100}$,
1994.	
A CENERAL NOTARY-State of Rebraska PATRICIA 8, WYNINE My Comm. Exp. July 22, 1995	Articia S. Wyr
State Michigan physical serious	Notary Public
	APPROVED
	NOV 2 2004
	DEPT. OF ENVIRONMENTAL QUALITY
	QUALIT
F15.50	State of Nebraska, Scotts Bluff County ss.
Return to: Lockwood Corporation	Entered in Numerical Index and filed for
P O Box 160	record the 4 day of Ougust 1994
Gering, Ne.	at 9:30 o'clock A.M., and recorded in
	Book <u>134</u> of <u>Muscellaneous</u> on page <u>739</u>
2	Mary On Fllias
NIJM. B	Mary to Ellis Register of Deeds By Cauline C. Hay Deputy
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COMPARED	

Title Survey for Lockwood Corporation

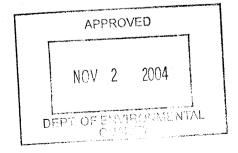
Intentionally Omitted due to size of Document

Document can be reviewed at NDEQ office in Lincoln, Nebraska

Drawing completed by M. C. Schaff & Associates
818 South Beltline Hwy East
Scottsbluff, Nebraska



APPENDIX B POST-CLOSURE PLAN



POST-CLOSURE PLAN WASTE ACID EVAPORATION POND

NED 044101442

LOCKWOOD CORPORATION

Highway 92 East

Gering, NE

June 28, 1995 Revised: October 26, 1995

NOV 2 2004

DEPT. OF ENVIRONMENTAL QUALITY

LOCKWOOD CORPORATION

Highway 92 East Gering, NE

POST-CLOSURE PLAN WASTE ACID EVAPORATION POND

NDEQ/EPA ID # NED044101442

SUBMITTED TO:

NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

PREPARED BY:

SORENSEN ENVIRONMENTAL 1901 BEAR COURT FORT COLLINS, CO 80525

> June 28, 1995 Revised: October 26, 1995



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2.0	GROUN	DWATER MONITORING PLAN
	2.1	Sample Locations and Frequency
,	2.2	Sampling and Analysis Plan
	•	2.2.1 Sampling Procedures
		2.2.2 Sample Handling and Analysis
	2.3	Monitoring Well Maintenance
	2.4	Record Keeping
3.0	MAINT	ENANCE ACTIVITIES
	3.1	Facility Inspections
	3.2	Maintenance
4.0	POST-C	LOSURE CARE PERIOD FACILITY CONTACT 6
	•	
AP	PENDIX	AS BUILT DRAWINGS OF COMPLIANCE MONITORING WELLS and
		WASTE ACID EVAPORATION POND SITE MAP



LOCKWOOD CORPORATION

REVISED POST-CLOSURE PLAN

WASTE ACID EVAPORATION POND

EPA I.D. NO. NED044101442

1.0 INTRODUCTION

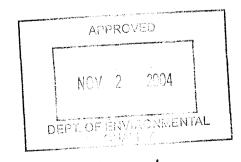
Lockwood Corporation (Lockwood) has maintained a closed waste acid evaporation pond under a RCRA Part B Hazardous Waste Post-Closure Permit issued in 1989. That permit remained valid for a five year period, after which permit renewal was required. Accordingly, Lockwood applied for and received a renewed Hazardous Waste Post-Closure Permit (Permit) from the Nebraska Department of Environmental Quality (NDEQ) on December 16, 1994. Section I.K.2 of the Permit requires Lockwood to prepare "a revised Post-Closure Plan that reflects the existing conditions at the site in accordance with 40 CFR 264.118." This revised plan is prepared to fulfill that requirement.

This Post-Closure Plan (PCP) identifies groundwater monitoring and impoundment maintenance activities currently carried out and to be carried out by Lockwood during the post-closure care period. Maintenance and monitoring activities described in this PCP are conducted in accordance with 40 CFR Part 264 to determine the facility's impact on groundwater quality in the uppermost aquifer underlying the facility.

In compliance of requirements of 40 CFR 264.118, this PCP identifies activities and the frequency of those activities that will be carried on after closure, and includes descriptions of the following:

- Planned monitoring activities and frequencies;
- Planned maintenance activities and frequencies; and
- Name, address, and phone number of the person or office to contact about the facility during the post-closure period.

Lockwood will keep a copy of the approved post-closure plan and all amendments and records at the facility during the post-closure care period.



Revised: October 26, 1995

2.0 GROUNDWATER MONITORING PLAN

The approved groundwater monitoring program monitors and evaluates the impact, if any, of the closed waste acid evaporation pond (facility) on groundwater quality in the uppermost aquifer underlying the facility, as required by 40 CFR 264. Compliance monitoring is performed in accordance with procedures outlined in Section 3.0, Sampling and Analysis Plan, of the RCRA Part B Post Closure Permit Application.

2.1 Sample Locations and Frequency

Groundwater sampling is conducted twice each year (March/April and September/October) from each of the following groundwater monitoring wells (in order of sampling): MW-8 (background), MW-6, MW-3, MW-7, MW-1, and MW-4 (as-built drawings of the compliance monitor wells and a site map of the facility [copied directly from the Permit] are presented in the Appendix). This sampling sequence goes from up- to down-gradient of the closed waste acid impoundment.

This sampling frequency will continue until such time as Lockwood demonstrates three (3) consecutive years of either non-detectable concentrations or concentrations less than the Groundwater Protection Standard for the specified compliance monitoring parameters analyzed. Upon such occurrence, Lockwood will request a permit modification in accordance with Permit condition I.B.1 with reduced sampling and analysis requirements. In the event that a Permit modification is granted, Lockwood will submit a revised Post-Closure Plan as required by 40 CFR 264.118.

2.2 Sampling and Analysis Plan

Compliance monitoring was performed in accordance with procedures outlined in the Sampling and Analysis Plan, Section 3.0 of the RCRA Part B Post Closure Permit Application. As required, initial (pre-sampling) groundwater elevation measurements were made, as well as a determination of total well depth. Groundwater samples are collected from the compliance monitoring wells and stored, transported, and analyzed in accordance with accepted scientific procedures and EPA methodology. As required in the Part B Permit, a Compliance Monitoring Report summarizing analytical data will be submitted to NDEQ within 45 days of receipt of analytical results.

Four replicate samples are collected from each well for the following parameters:

- Volatile Organic Compounds;
- Total Cadmium;
- Total Lead; and
- Total Silver.



2

In response to the NDEQ Notice of Violation (NOV) of August 8, 1994, well recovery time after purging and sampling is recorded to the nearest half minute with the continuous use of an electronic water level indicator. This is done to demonstrate acceptable well performance. Well bore scrape samples will be collected and analyzed, and well yield and recovery evaluated through performance of a plug test in the event that both of the following conditions are encountered:

- Failure to produce visually clear sample water after purging of five (5) casing volumes; and
- Post-purging water surface depression below the initial water surface level in excess of 0.25 feet after a recovery period of not greater than 15 minutes.

2.2.1 Sampling Procedures

Procedures outlined in the approved Part B permit application are undertaken during each sampling event, with the following modifications:

Step 6: The dedicated %" diameter high density polyethylene (HDPE) tubing extending the entire bore length with a foot valve connected at the end is removed and checked for silt build-up in the end. If needed, the tubing and foot valve is cleaned with deionized water, and the tubing is replaced in the well. A Waterra hand pump is attached to the dedicated tubing and the steel riser casing of the well.

Step 9: An 8 ft. length of ¼" diameter HDPE tubing is inserted into the dedicated %" diameter HDPE tubing for collection of samples. Approximately 2 feet of this ¼" tubing extends from the top end of the 5/8" tube. Four 40-mL VOA vials for VOC analysis and four glass bottles with HNO₃ preservative for total metals analysis are filled at each well and immediately placed on ice and cooled to 4°C.

2.2.2 Sample Handling and Analysis

All samples are handled in strict accordance with accepted Chain-of-Custody and laboratory Quality Control requirements, as described in the RCRA Part B Post-Closure Permit Application and adopted in the Permit.

In the event that analytical results show detectable concentrations greater than accepted Groundwater Protection Standards for the aforementioned listed constituents, statistical evaluation of those data will be conducted to determine if statistically significant changes in the groundwater quality have occurred. Statistical analysis of the analytical results will be provided in accordance with 40 CFR 264.97.



Revised: October 26, 1995

2.3 Monitoring Well Maintenance

Concrete-filled steel pipes are in place around each monitoring well at the Lockwood site to protect the wells from vehicle impacts. Steel frames anchored in concrete have been constructed around each well for additional protection. Well damage due to surface disturbance is accordingly unlikely. Regular maintenance of the area surrounding each well will include weeding and/or mowing so that the wells remain visible and readily accessible.

Well development to ensure hydraulic connection was done for each well after well construction. Development procedures described below apply not only to new wells, but also to monitoring wells in which siltation has occurred and therefore in which well rehabilitation is necessary to reestablish hydraulic connection with the aquifer (as demonstrated by the occurrence of either condition described herein in Section 2.2). In the event that an existing monitoring well loses it's ability to produce representative samples, the following steps will be completed to rehabilitate the well:

- 1. Review monitoring well construction details to obtain information regarding screen size, screened interval, and total well depth;
- 2. Conduct an initial rising head or falling head permeability test to determine initial hydraulic conductivity of the screened interval;
- 3. Cause water to move in and out of the well screen to move silt and clay particles out of the filter pack around the well screen and into suspension within the well. Water movement may be accomplished by pumping, using a surge block or bailer;
- 4. Remove sediment-laden water by pumping;
- 5. Continue surging until the water removed is free of suspended silt and clay particles; and
- 6. Conduct a final permeability test and compare results to the initial test to evaluate rehabilitation success.

2.4 Record Keeping

Lockwood will maintain a record of ground water analytical data as measured and in a form necessary for the determination of statistical significance. Monitoring data will be maintained on-site and summarized in a tabular format for easy reference. Transmittal of results to the State and the Regional Administrator will be done in accordance with Permit condition III.I.



Revised: October 26, 1995

3.0 MAINTENANCE ACTIVITIES

3.1 Facility Inspections

As specified in Section II.D., General Inspection Requirements of the Permit, the following items at the closed waste acid impoundment are inspected on a monthly basis:

• Gates and Locks: Inspect for corrosion and lack of warning

signs;

Fence: Inspect for broken ties, corrosion, holes, and

distortion;

Gravel and Clay Covers: Inspect for erosion and excessive weed or

plant growth;

• Drainage: Inspect for ponding and improper drainage

detrimental to the gravel or soil cover; and

Monitoring and Compliance Wells: Inspect for damage to riser pipes, casing,

caps, locks, and concrete pad.

Also in accordance with the aforementioned Section II.D., Lockwood will repair "any deterioration or malfunction discovered by inspection," and maintain records of all inspection activities.

3.2 Maintenance

Post closure maintenance of the closed waste acid evaporation pond and the associated monitoring wells will be minimal. The facility's gentle surface slopes and final gravel stabilization cover minimize erosion and require very little maintenance. All surfaces are graded to drain to the plant's stormwater surface drainage. Routine maintenance will be conducted as part of normal plant maintenance policies and in accordance with the above maintenance schedule. These activities will ensure proper drainage and prevent surface water pooling and erosion to the cover.

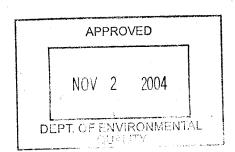
Written record copies of all inspections and maintenance activities performed during the post-closure care period will be kept with the Post-Closure Plan at the Lockwood Corporation offices.



4.0 POST-CLOSURE CARE PERIOD FACILITY CONTACT

The following may be contacted for information about the facility during the post-closure care period:

Mr. Kent DeWitt
Manager of Employee Health and Safety
Lockwood Corporation
220757 Highway 92 East
P.O. Box 160
Gering, NE 69341
Telephone Number: (308) 436-5051



APPENDIX

AS BUILT DRAWINGS OF COMPLIANCE MONITORING WELLS

and

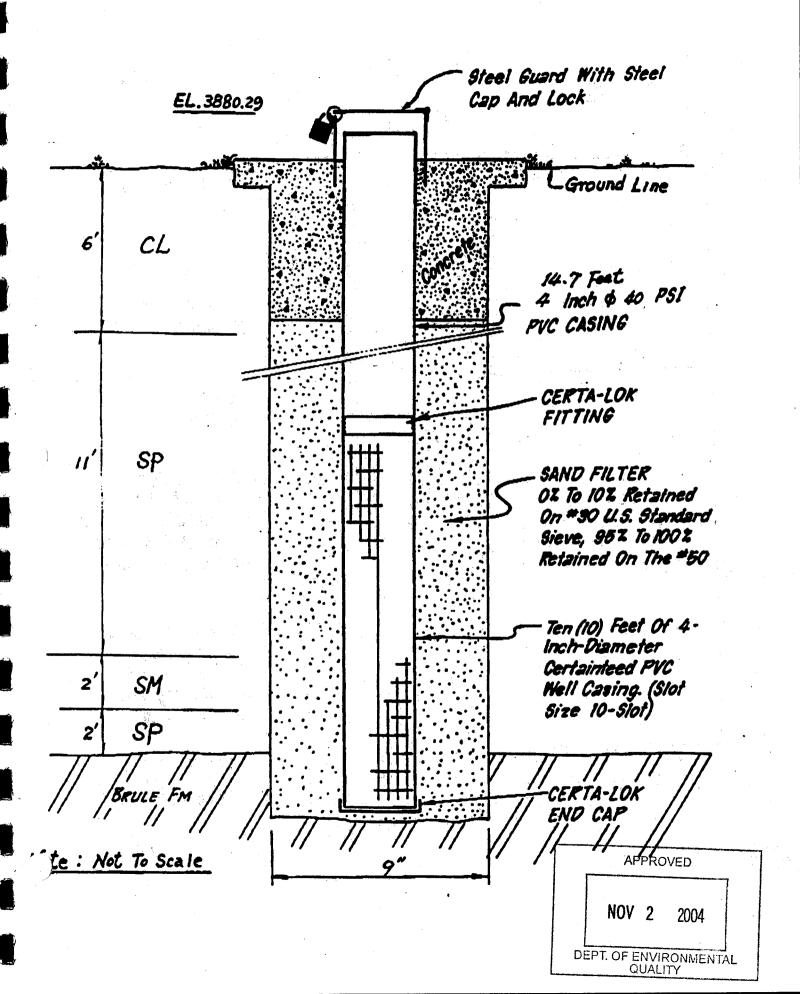
WASTE ACID EVAPORATION POND SITE MAP



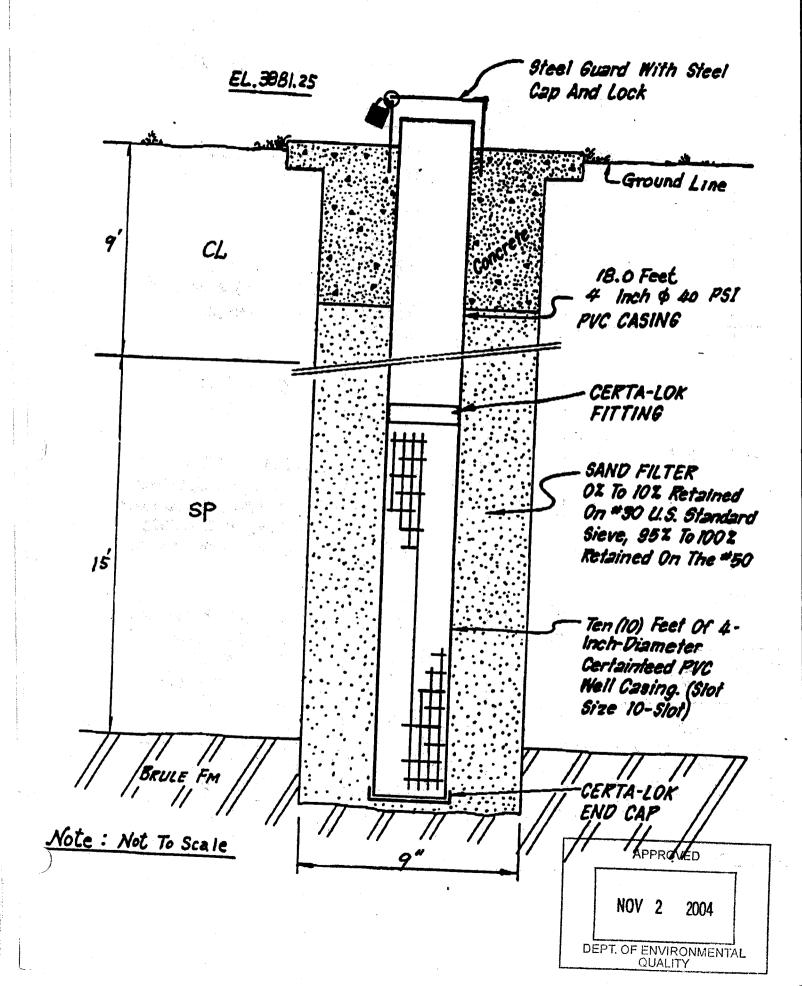
Revised: October 26, 1995

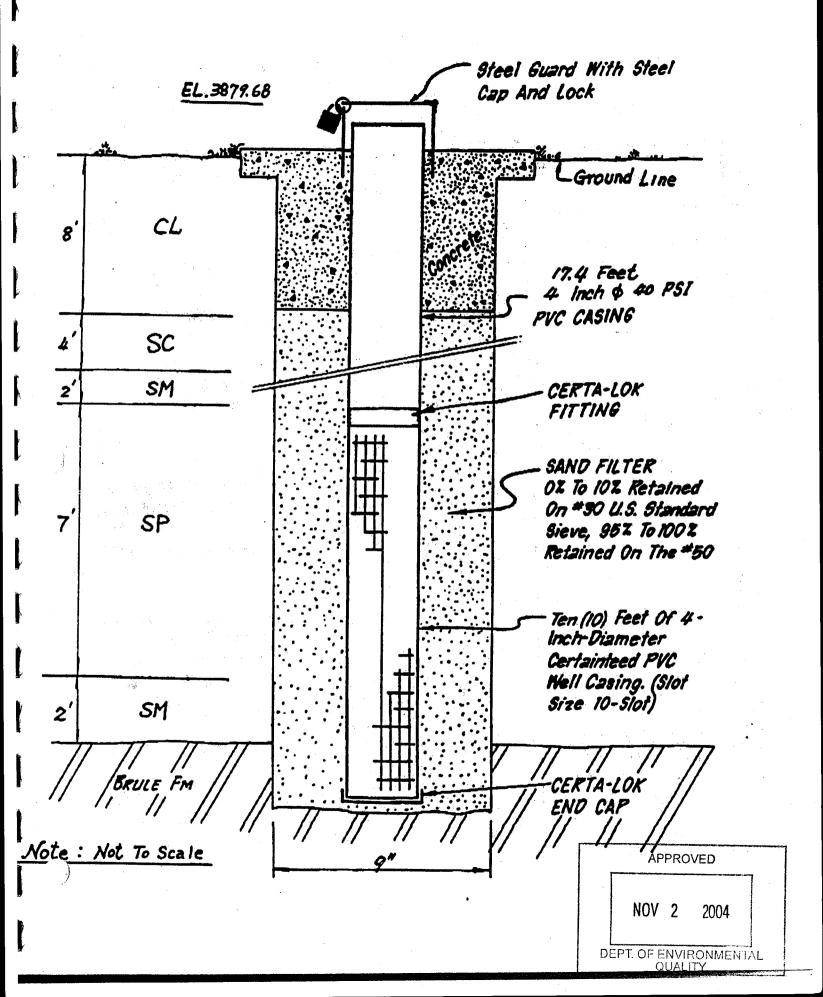
FIGURE

MONITORING/INTERCEPTOR WELL No. M-1



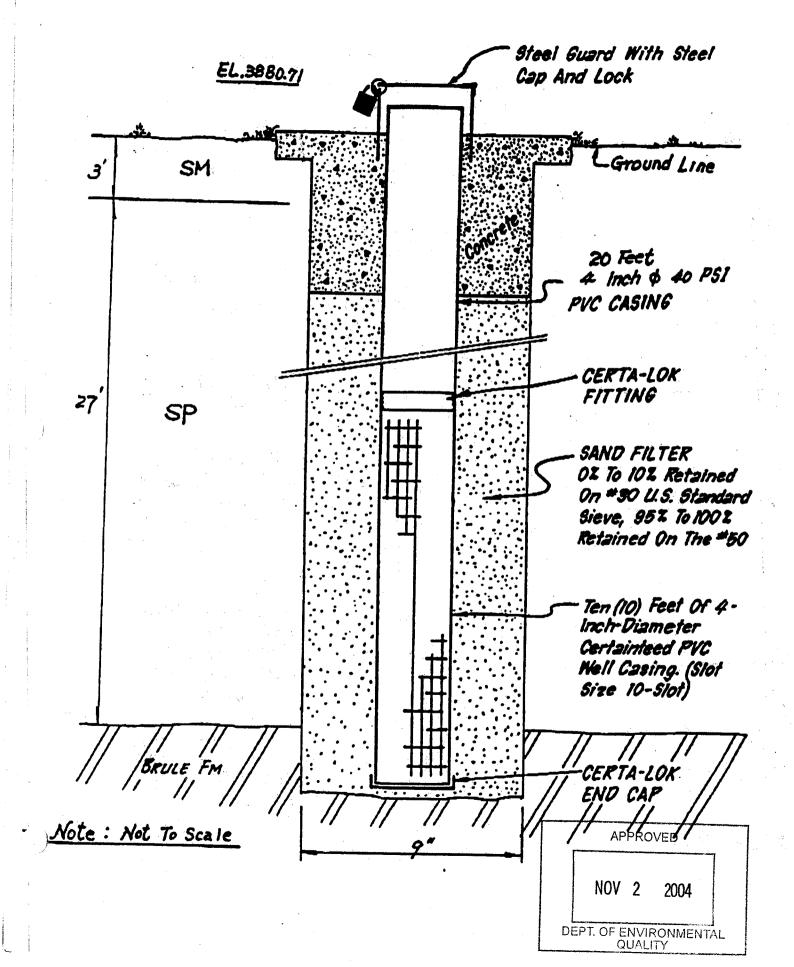
MONITORING/INTERCEPTOR WELL No.M-3





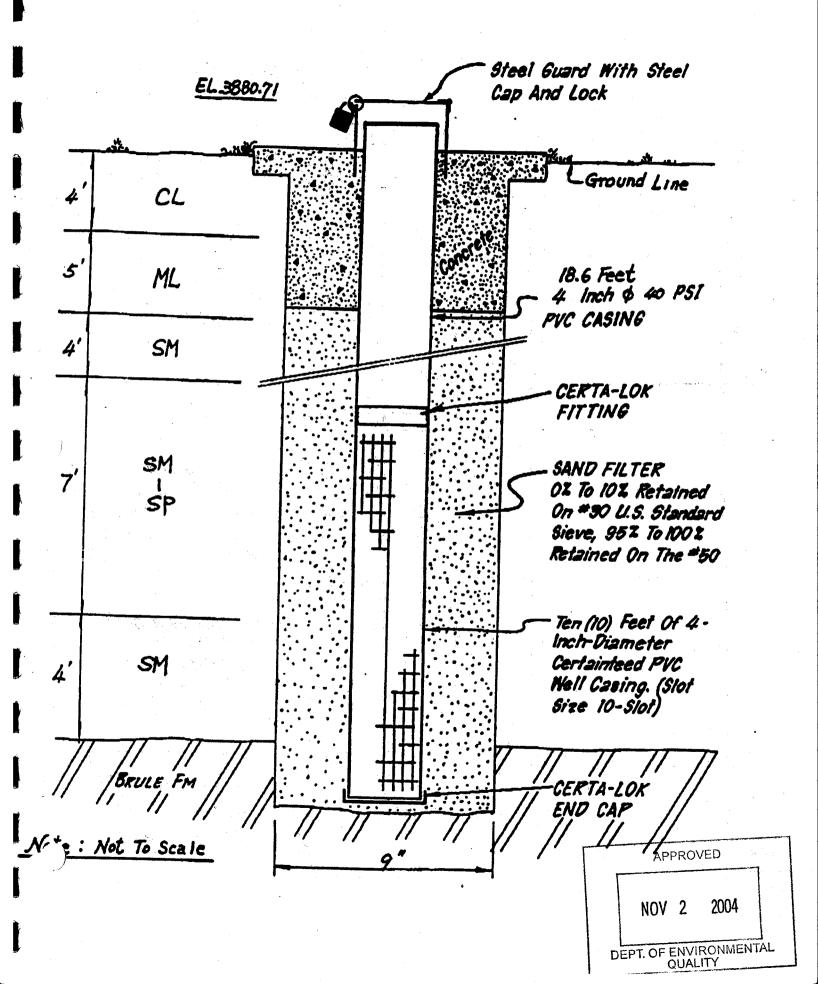
FIGURE

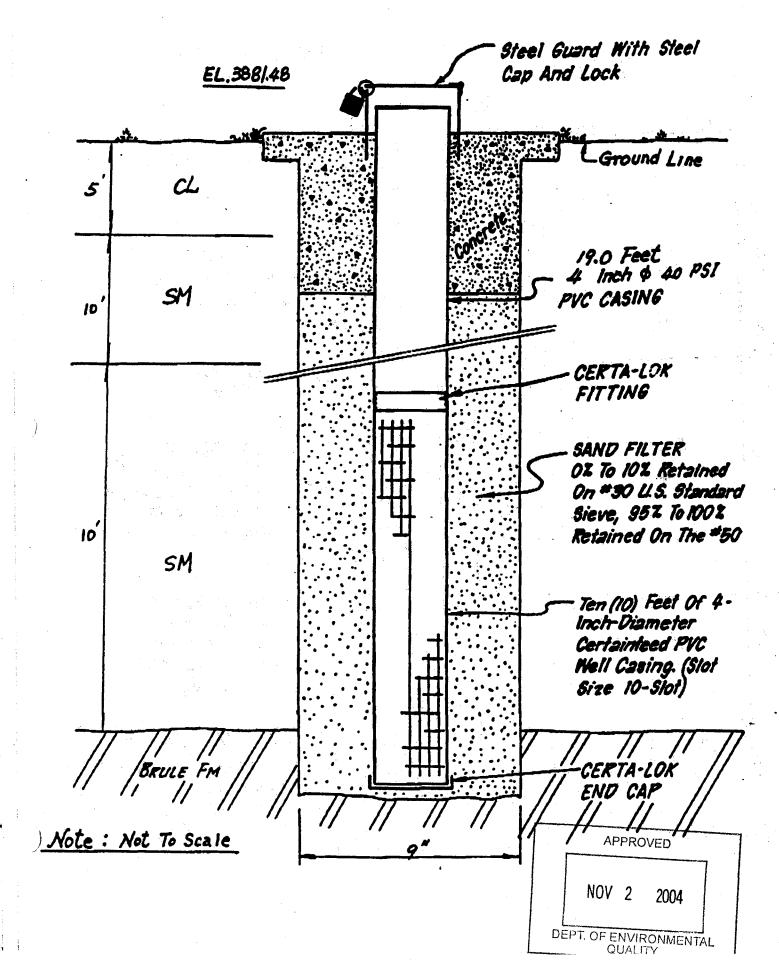
MONITORING/INTERCEPTOR WELL No. M-6



FIGURE

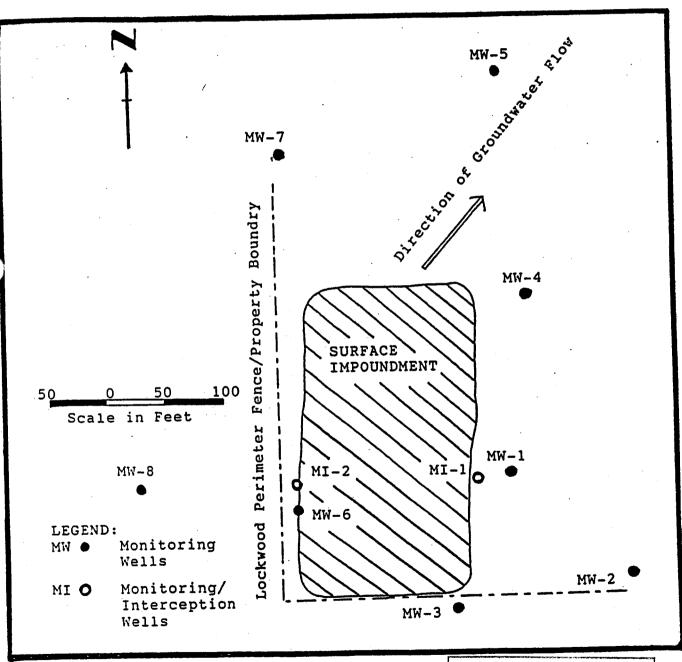
MONITORING/INTERCEPTOR WELL No. M-7

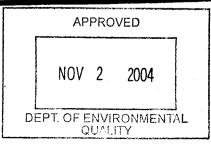




Lockwood Corporation Gering, Nebraska NDEQ/EPA I.D. Number: NED044101442 Attachment III Page III.1

MAP - MONITORING WELLS - LOCATIONS





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Gering, Nebraska

Post Closure Plan Foress

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September 19/8

POST CLOSURE PLAN
FOR
LOCKWOOD CORPORATION
WASTE ACID EVAPORATION POND
EPA I.D. NO. NED044101442

IN ACCORDANCE WITH:

U.S. ENVIRONMENTAL PROTECTION AGENCY
RESOURCE CONSERVATION AND RECOVERY ACT
HAZARDOUS WASTE MANAGEMENT RULES AND REGULATIONS
40 CFR PARTS 264 & 265

AND

NEBRASKA DEPARTMENT OF ENVIRONMENTAL CONTROL
RULES AND REGULATIONS GOVERNING HAZARDOUS WASTE MANAGEMENT

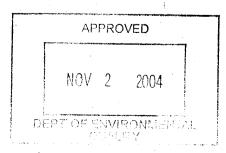
SEPTEMBER 1985

SUBMITTED TO

NEBRASKA DEPARTMENT OF ENVIRONMENTAL CONTROL

PREPARED BY:

HOSKINS-WESTERN-SONDEREGGER, INC. 825 J STREET LINCOLN, NEBRASKA 68501



POST CLOSURE PLAN

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. . . Appendix . . .

Figure 1 - Proposed Location of Monitoring and Interceptor Wells

Figure 2 - Monitoring and Interceptor Well Design

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INDTRODUCTION

This post closure plan identifies the groundwater monitoring plan and maintenance activities which will be carried on by Lockwood Corporation at the waste acid evaporation facility after closure during the post-closure care period. The frequency of activities and maintenance procedures are outlined to ensure that the integrity of the cap, and final cover, are maintained in accordance with 40 CFR part 265.

Lockwood Corporation will keep a copy of the post-closure plan and all amendments and records at the plant during the post-closure care period.

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I. GROUNDWATER MONITORING PLAN

The proposed groundwater monitoring program will monitor and evaluate the impact, if any, of the closed waste acid evaporation pond (facility) or groundwater quality in the Pleistocene and Recent alluvium overlying the Brule bedrock. At the Lockwood site, these deposits constitute the "uppermost aquifer underlying the facility", as stipulated in 40 CFR, 265.90 Subpart F. The proposed monitoring program will continue through the post-closure care period.

A. Monitoring Wells

The monitoring system will consist of a series of wells surrounding the waste site. Wells will be located hydraulically down-gradient and close to the pit to monitor any potential contamination; some wells will be located hydraulically up-gradient and further from the pit to determine background quality. Wells will be fully penetrating to the top of the Brule bedrock and will be constructed in a manner to allow representative samples of groundwater to be collected.

shown in Figure 1 due to the nature of the groundwater flow at the site. As documented in the hydrogeologic investigation, groundwater flows alternately southerly (irrigation season) and northerly (non-irrigation periods). This fluctuating local flow system is due to the presence of unlined irrigation canals and ditches which transmit significant amounts of recharge to the groundwater. Thus, there is no single, well-defined "down-gradient" direction and wells must be strategically

placed around the waste site to properly monitor the area. wells intended to detect any contaminant migration are located in close proximity to the facility ("down-gradient" wells MI-1, MI-2, M-1, M-3 M-4, and M-6, see figure 1). Four wells intended to sample background water quality are located further from the facility and are up-gradient, at least seasonally (these "up-gradient" wells include M-2, M-5, M-7, and M-8, see figure 1).

Well Construction. 2.

- Wells will be constructed according to State guidelines (Nebraska Department of Environmental Control, 1984) and industry standards (EPA/NWWA, 1976). Figure 2 summarizes well construction details. Depth of wells will be 20 to 25 feet to the top of the Brule formation.
- Wells MI-1 and MI-2 will be constructed of eight-inch b. casing and screen and will be capable of being pumped at larger capacities. These wells will be used as interceptor or recovery wells in the event contamination of the groundwater occurs.
- All other wells will utilize four-inch diameter casing and c. screen and will be used soley for monitoring purposes.
- General inspection of the surficial expres-Well Maintenance. 3. sion of the wells (casing, cap, seal) will be done at each groundwater sampling episode. Well maintenance, repair, or replacement functions will be minimal due to the construction of the wells. Lockwook will repair or replace wells or other

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NOV 2 2004 equipment as needed. Wells will be protected at the surface by posts, fencing, and protective outer casing in order to minimize damage to the wells from surface activities.

B. Sampling and Analysis Plan

Samples will be obtained from the groundwater monitoring system on a regular schedule and be stored, transported, and analyzed under accepted scientific procedures and EPA methodology. Monitoring data will be maintained readily available on-site and summarized in a tabular format for easy reference. Transmittal of results to the State and the Regional Administrator will be done in accordance with § 265.94.

- 1. <u>Monitored Parameters</u>. Analysis of samples will be done performed for the following parameters.
 - a. EP Toxicity metals and parameters characterizing the suitability of the groundwater for use as a drinking water supply. See Appendix III 40 CFR 265 for a list of parameters.
 - b. Parameters establishing groundwater quality:

chloride,

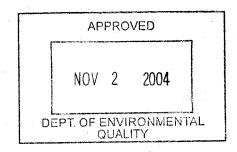
iron

manganese

phenols

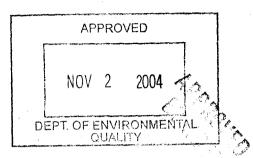
sodium

sulfate



c. Parameters used as indicators of groundwater contamination:

pH
specific conductance
total organic carbon
total organic halogen



2. Sampling Frequency.

- a. Initial or background quality will be established by sampling quarterly for one year, with analyses of each sample for all parameters listed above.
- b. For each indicator parameter specified in (c) above, four replicate measurements will be obtained for each sample.

 Background arithmetic mean and variance will be determined by pooling the replicate measurements from "up-gradient" wells.
- for analysis of parameters listed in Sections (a) and (b) above. Samples will be collected semi-annually for analysis of parameters listed in section (c) above.
 - If, after two years of monitoring, evaluation of data by methods described in 40 CFR, Part 265.93 indicates no contamination has occurred and results from various wells are consistent, consideration will be given to reducing the frequency of sampling for at least two of the background or "up-gradient" wells, and for one of the wells in each of the "down-gradient" couplets (ie, M-1/MI-1, and M-6/MI-2, see Figure 1).

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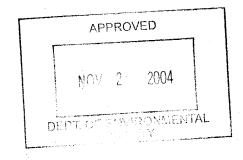
3. Sampling and Analysis Procedures.

- a. Sampling methodology will be consistent with industry standards and EPA requirements. (Scalf, etial. 1981). Groundwater samples will be collected by submersible pump or inert gas-lift pump, with pump type being consistent at each well over the sampling period. Field determinations of pH and specific conductance will be made. Depth to water in each well will be determined at the time the water quality sample is collected.
- b. Sample preservation will be done in accordance with Standard Methods (APHA, 1980), the National Handbook of Recommended Methods for Water Data Requisition (USGS, 1984) and currently published EPA laboratory methodology.
- c. Samples will be shipped to a commercial laboratory by commercial transportation and arrive at the laboratory within 30 hours of collection. Lockwood will maintain chain of custody by completing the attached Hazardous Waste Analysis and Chain of Custody Sheet for all samples.
- d. Analyses will be performed according to the references cited above and as per 40 CFR Part 265 regulations.
- e. Evaluation of the data and owner/operator response will be done in accordance with 40 CFR Part 265.93. This analysis will determine if statistically significant increases (or decreases, in the case of pH) in concentration of water quality parameters have occurred. If statistically significant increases are determined, NDEC will be noti-

fied and remedial response as outlined in 40 CFR Part 265.93 will be implemented to contain or remove the contamination upon approval of NDEC.

C. Records

Copies of all groundwater monitoring activities and maintenance performed during the post-closure period will be kept with the post-closure plan at the Lockwood Corporation Plant, site of the facility.



II. MAINTENANCE ACTIVITIES

A. Facility Inspections

Annual and routine periodic inspections of the facility final cover, security fencing, and groundwater monitoring system will be conducted to ensure that each item remains functionally reliable throughout the post-closure care period.

B. Maintenance

Post closure maintenance of the closed waste acid evaporation pit and monitoring wells system will be minimal. The facility's gentle surface slopes and final gravel stabilization cover minimize erosion and will require very little maintenance. All surfaces are graded to drain to the plant's stormwater surface drainage. Routine maintenance will be conducted according to usual plant maintenance policies to ensure that drainage is maintained and surface water pooling and erosion is prevented. Written record copies of all inspections and maintenance activities performed during the post closure care period will be kept with the post-closure plan at Lockwood Corporation.

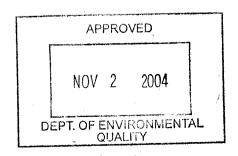
The following lists the address and phone number for contacting Lockwood about the facility during the care period:

Lockwood Corporation

Post Office Box 160

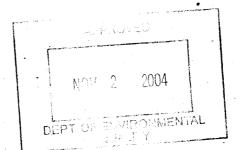
Gering, Nebraska 69341

Phone: (308) 436-5051



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APPENDIX

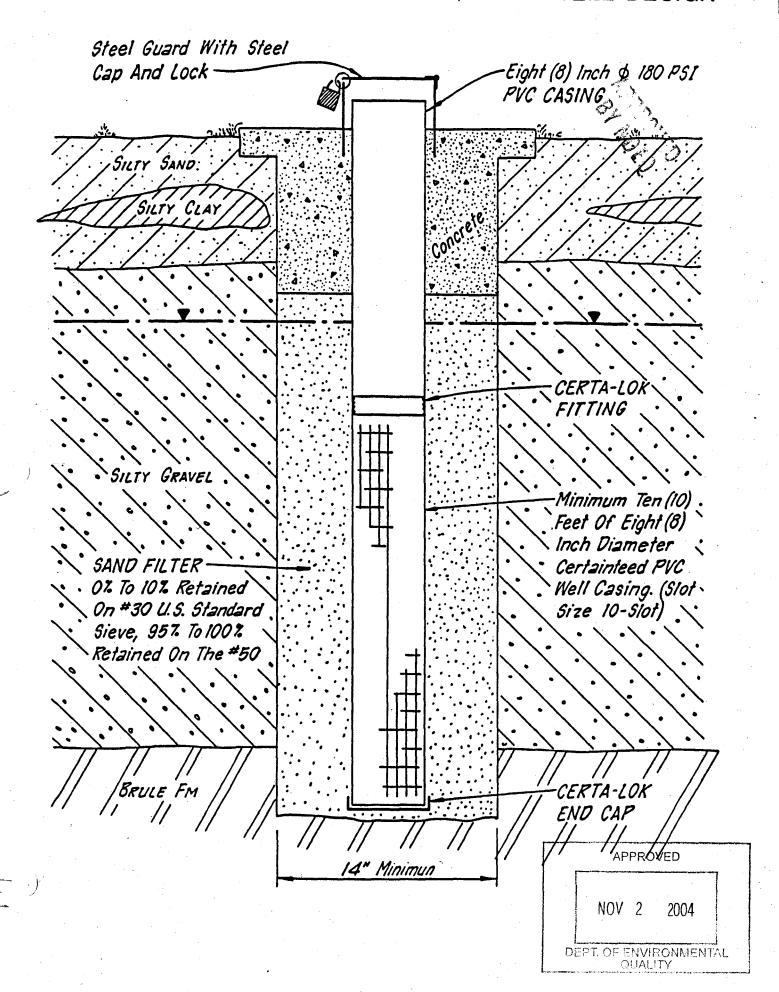


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FIGURE 2 MONITORING / INTERCEPTOR WELL DESIGN





HAZARDOUS WASTE ANALYSIS REQUEST AND CHAIN OF CUSTODY SHEET

To .				· .		Date: _		Pro	ject No:		
						Re:					
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						Facility	Contact:		<u> </u>		10.10
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* TYPE - Indicate water, soil, sludge, etc.:
Distribution: Original: Accompanies Shipment
Copies: To Respective Lab and Coordinator Permanent Files